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ABSTRACT

Thirty-five units of instruction are included in this core curriculum in farm management for postsecondary farm and ranch management programs. Units of instruction are divided into 12 instructional areas: (1) Introduction to Financial Management, (2) Farm Business Arrangement, (3) Credit Management, (4) Budgeting, (5) Recordkeeping, (6) Record Analysis, (7) Labor Management, (8) Marketing, (9) Tax Management, (10) Risk Management, (11) Farm Business Center, and (12) Estate Planning. Each unit follows a typical format that includes terminal objectives, specific objectives, suggested activities, instructional materials, information sheets, transparency masters, assignment sheets, and tests with answer sheets. (BPB)

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CE 030 645

KANSAS POSTSECONDARY FARM AND RANCH MANAGEMENT PROJECT

The identification of tasks performed by workers in production agriculture, and the preparation of instructional materials for use by teachers of farm and ranch management programs.

FARM MANAGEMENT
BASIC CORE CURRICULUM

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FOREWORD

This publication, Farm Management, is one of four designed to provide curriculum for postsecondary farm and ranch management programs. These units will provide direction in the instructional program for postsecondary agriculture students and teachers in the State of Kansas. This publication can also provide articulation between secondary and postsecondary agriculture programs.

Kansas is an agricultural production state, it's economy is dependent upon the ability to produce and manage these vast amounts of raw agriculture products. This core must be supplemented with current technical information that is necessary in today's dynamic agriculture. The economic tools needed for agriculture production to maximize returns are included in each section of the core. Certainly budgeting, credit management, record keeping and analysis, labor management, marketing, estate planning, tax management and risk management are all direct applications of production economic principles which are the main features of this core.

These tools will make our farm systems more efficient and may be considered the last vestige of the traditional free enterprise system. The changes of the future will be exciting times with the proficiency of domestic marketing, use of foreign markets and the political astuteness of farmers, who are the cutting edge for American agriculture.

A special thanks to the agriculture education teachers in Kansas who assisted by writing the units in this publication and to the consultants who provided the directional thrust based on their background being directly involved in the operation of farms or ranches.

Appreciation should be extended to Dr. James Albracht, Project Coordinator and Dean Prochaska, Director of Vocational Education for funding support.

Damon E. Slyter
Les Olsen

FARM AND RANCH MANAGEMENT PROGRAM

FARM MANAGEMENT

Section A	INTRODUCTION TO FINANCIAL MANAGEMENT	
	Unit I	Goal Setting
	Unit II	Decision Making in Farm Management
Section B	FARM BUSINESS ARRANGEMENT	
	Unit I	Proprietorship
	Unit II	Partnership or Corporation
	Unit III	Leasing Arrangements
Section C	CREDIT MANAGEMENT	
	Unit I	Sources of Credit
Section D	BUDGETING	
	Unit I	Farm Budget
	Unit II	Personal Budget
Section E	RECORD KEEPING	
	Unit I	Value and Use of Records
	Unit II	Posting Entries
	Unit III	Farm Inventories
	Unit IV	Inventories: Non-Depreciable Assets
	Unit V	Depreciation Methods
	Unit VI	Determining Net Worth
	Unit VII	Net Income on Accrual Basis
Section F	RECORD ANALYSIS	
	Unit I	Crop Enterprise Analysis
	Unit II	Livestock Enterprise Analysis
	Unit III	Machinery and Building Enterprise Analysis
	Unit IV	Total Farm Analysis
Section G	LABOR MANAGEMENT	
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	Unit II	Hiring and Keeping Labor
	Unit III	Managing Farm Labor

Section H	MARKETING	
	Unit I	Supply and Demand
	Unit II	Forward Contracting
	Unit III	Futures Markets Introduction
	Unit IV	Futures Trading
	Unit V	Livestock Futures
	Unit VI	Grain Futures
	Unit VII	Grain Marketing Plan
Section I	TAX MANAGEMENT	
	Unit I	Income Tax Management
	Unit II	Retirement Programs
Section J	RISK MANAGEMENT	
	Unit I	Farm Insurance
	Unit II	Farm Law
Section K	FARM BUSINESS CENTER	
	Unit I	Office and Filing System
Section L	ESTATE PLANNING	
	Unit I	Estates and Trusts

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Ray Flickner	Record Keeping Marketing Farm Business Center
Darrell Cardell	Record Analysis Labor Management
Charles Kerr	Marketing
Don Martin	Marketing

James Albracht
Editor

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INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT I

GOAL SETTING

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to draw up a list of personal goals, classify them, place them on a priority scale and explain procedures for achieving these goals. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Identify four goals for a farm family.
2. List three values for setting farm and family goals.
3. Classify goals as to short term, intermediate, and long term and give two examples of each.
4. List three factors for determining the priority of farm family goals.
5. Identify five farm family goals which compete for time, energy, and money, and give an example of each.
6. Identify four techniques to use in achieving farm family goals.

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT 1

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Develop a flannel board presentation on "Steps to Farm Family Satisfaction"
5. Prepare a list of possible goals for a "Case" farm
6. Discuss Terminal and Specific Objectives
7. Discuss Information and Assignment Sheets
8. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and turn in to instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Points to Recognize in Setting Goals

INSTRUCTIONAL MATERIALS

TM 2 - Steps to Farm Family Satisfaction

TM 3 - Resource-Income-Satisfaction

4. Assignment Sheets

   #1 - Goals for the "Case" farm

   #2 - Things to Do

   #3 - Basic Values

5. Test

6. Answers to Test

References:

1. Financial Planning in Agriculture, Schneeberger & Osburn, The Interstate Printers & Publishers, Inc. 1977.

2. Managing Our Financial Future, North Central Regional Extension Publication 34, Agricultural Bulletin Building, 1535 Observatory Drive, Madison, Wisconsin 53706, 1973.

3. Farm Management Handbook, Mortenson & Luening, The Interstate Printers & Publishers, Danville, Illinois, 1972.

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT 1

INFORMATION SHEET

I. Possible Goals Include

  A. Owning a farm

  B. Building a house

  C. Providing education for children

  D. Being a good neighbor

  E. Taking a yearly vacation

  F. Having a neat farmstead

  G. Being a community leader

II. Three Values For Setting Family Goals

  A. What is worthwhile

  B. Explain why we do one thing and not another

  C. Lead to permanent goals

III. Goals Are Classified As

  A. Short term

    1. Finished quickly

    2. Needed to provide satisfaction

    3. Examples

      a. Run a soils test to plan fertilizer rate

      b. Finish a calf

      c. Paint a building

  B. Intermediate

    1. A group of related short terms goals

    2. Provide basis for next stage

INFORMATION SHEET

3. Examples
    a. Raise funds and put up a building
    b. Buy a farm

C. Long term
    1. Give sense of direction
    2. Higher level activity
    3. Examples
        a. Personality development
        b. Leading useful life
        c. Be a better citizen

IV. Factors For Determining The Priority of Goals
    A. Value - $10 versus $10,000
    B. Time - Were the results comparable to time spent elsewhere
    C. Orderly basis - Most important first, avoiding jumping from crisis

V. Farm Family Goals Which Compete For Time, Money and Energy
    A. Improve the capital base - Example: Added feeding capacity
    B. Provide family comfort or convenience - Example: Remodel kitchen
    C. Make the farmstead more attractive - Example: Painting
    D. Spend time on recreation - Example: Go on a picnic
    E. Provide time to manage the business - Example: Spend time going over records

VI. Techniques In Goal Reaching
    A. Have regular checkups - are we on target?
    B. Use saved time and effort wisely

INFORMATION SHEET

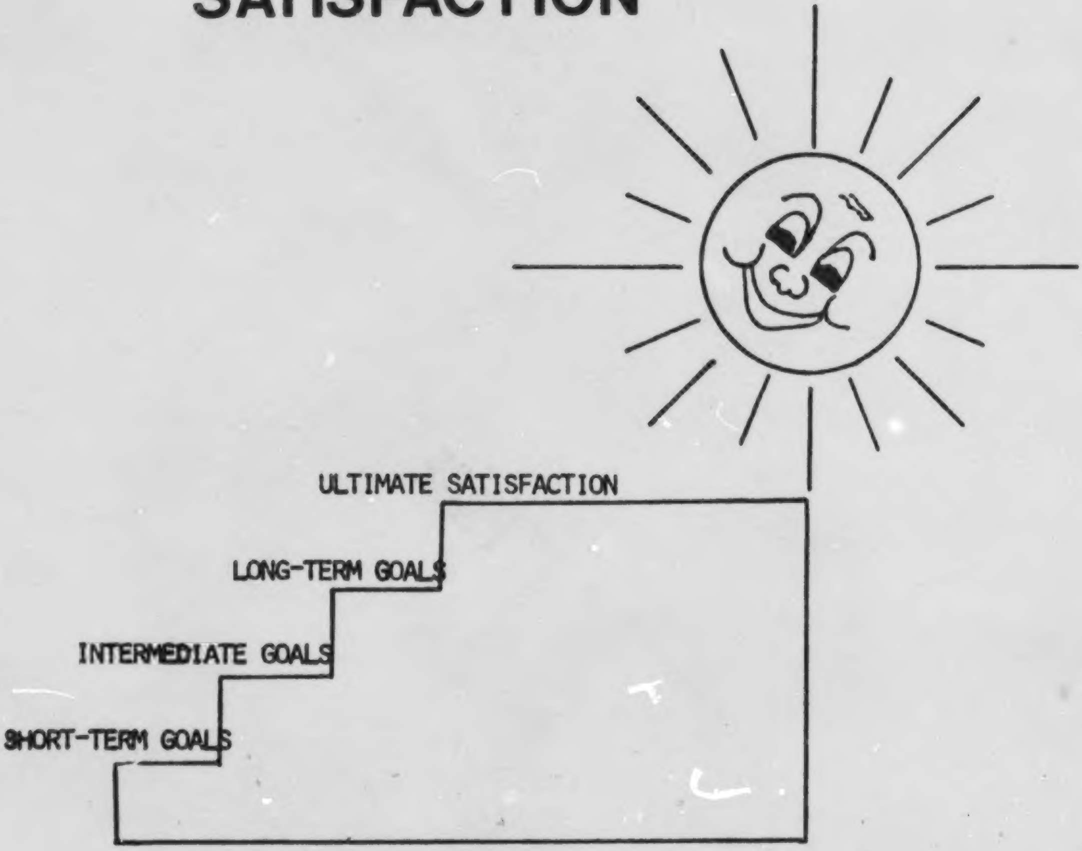
C. Organize efforts on the "Things to Do" worklist (Check off completions regularly for satisfaction)

D. Check for slow or non-moving activities on the worklist by facing reality after conferring with farm management experts, and considering the funds available

POINTS TO RECOGNIZE IN SETTING GOALS

1. ALL FAMILY MEMBERS SHOULD CONTRIBUTE.
2. RECOGNIZE THAT THERE ARE BOTH INDIVIDUAL AND FAMILY GOALS.
3. RECOGNIZE BOTH LONG AND SHORT TERM GOALS.
4. SELECT GOALS IN TERMS OF AVAILABLE RESOURCES.
5. COMPETITION BETWEEN GOALS IS NORMAL AND DESIRABLE.
6. GOALS MUST BE MODIFIED AS RESOURCES CHANGE.
7. CONSTANTLY MODIFY GOALS AS RESOURCES CHANGE OR AS THE FAMILY IS ABLE TO USE RESOURCES MORE EFFICIENTLY.

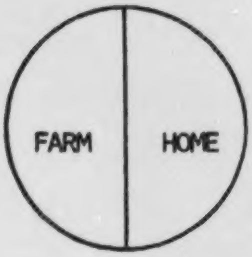
STEPS TO FARM FAMILY SATISFACTION



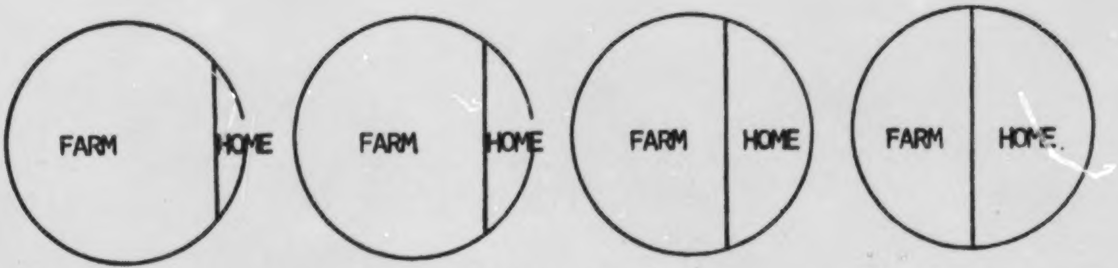
PLACE PICTURES AND OTHER ITEMS ON FLANNEL BOARD TO ILLUSTRATE ALL TYPES OF GOALS:

EXAMPLE: INCOME - DOLLAR
RECREATION - MAN LANDING FISH
PRIDE - WELL-KEPT FARMSTEAD
RETIREMENT - MAN IN ROCKER
EDUCATION - BOY IN CAP AND GOWN
ETC.

RESOURCE-INCOME-SATISFACTION



IDEAL USE OF NET FARM INCOME



WE MUST INVOLVE THE FAMILY AS A WHOLE IN DETERMINING THE FARM-FAMILY GOALS. IDEALLY THE NET FARM INCOME SHOULD BE USED TO MAXIMIZE ENJOYABLE FAMILY LIVING AND HOME LIFE. HOWEVER, DUE TO THE STRESS OF FARM DEBT AND THE BUILDING OF FARM BUSINESS, THIS MAY NOT BE POSSIBLE IMMEDIATELY. NEVERTHELESS, THE FARM-FAMILY GOALS SHOULD AIM TOWARD AN EQUITABLE USE OF AVAILABLE FUNDS AS SOON AS POSSIBLE.

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT I

ASSIGNMENT SHEET #1: Goals for the "Case" Farm

After completing the "Case Farm" Business Analysis make a list of goals based on what you would do with this farm unit.

Short Term Goals -

Intermediate Goals -

Long Term Goals -

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT 1

ASSIGNMENT SHEET #2: Things to Do

Time Period:________________________________ **Date Prepared:**________________________________

		Date	Initial When Complete
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT 1

ASSIGNMENT SHEET #3: Basic Values

Assessment of Basic Values

Using the following rating scale place a number in each goal as to your "Team's" desires;

5 - very important
4 - important
3 - desirable
2 - not important
1 - not needed

	Husband	Wife
Owning a farm		
Building a new house		
Education for our children		
Freedom from debt		
A good retirement nest egg		
Regularly planned family recreation		
Nearly new machinery		
Fancy breeding livestock		
Plenty of wholesome food		
Attractive clothing		
Adequate medical care		
Books & magazines to read		
Adequate life insurance		
Well kept yard & garden		
Prestige as a farm couple		
Be neighborly		
Sharing love between family members		
A high degree of self-discipline		
A high level of peace of mind		

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT I

TEST

1. List four goals for a farm family.
2. List three values for setting family goals.
3. Classify goals as to short term, intermediate, and long term, and give two examples of each.
4. List three factors for determining farm family goals.
5. Identify five farm family goals which compete for time, energy, and money, and give an example of each.
6. Identify four techniques to use in achieving farm family goals.

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT 1

ANSWERS TO TEST

1. (Any four of the following)
    - a. Owning a farm
    - b. Providing an education for their children
    - c. Building a new house
    - d. Being a good neighbor
    - e. Taking a yearly vacation
    - f. Having a neat farmstead
    - g. Being a community leader
2. (1) Define what is worthwhile
    - (2) Explains why we do one thing, not another
    - (3) Leads to permanent goals
3. Any two:
    - a. Short term - (1) Run a soil test to plan fertilizer rate
        - (2) Paint a building
        - (3) Finish a calf
    - b. Intermediate - (1) Raise funds and put up a building
        - (2) Buy a farm
    - c. Long term - (1) Personality development
        - (2) Lead a useful life
        - (3) Be a better citizen

ANSWERS TO TEST

4. Explanation should include:

    a. $ values - $10 versus $10,000

    b. Time factors - Were the results comparable to time spent elsewhere

    c. Orderly basis - list the most important first and avoid jumping from crisis to crisis

5. Farm family goals which compete for time, money, and energy

    a. Improve the capital base - Example: Added feeding capacity

    b. Provide family comfort or convenience - Example: Remodel the kitchen

    c. Make the farmstead more attractive - Example: Paint a building

    d. Spend time on recreation - Example: Go on a picnic

    e. Provide time to manage the business - Example: Spend time going over records

6. All of the following:

    a. Have regular checkups - are we on target?

    b. Use saved time and effort wisely

    c. Organize efforts on the "Things to Do" worklist (Check off completions regularly for satisfaction)

    d. Check for slow or non-moving activities on the worklist by facing reality after conferring with farm management experts, and considering the funds available

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

DECISION MAKING IN FARM MANAGEMENT

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to apply decision making techniques to a listing of typical farm management problems. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. List six factors in decision making and give an example of each.
2. List three factors to include in a strategy for decision making.
3. List the five basic steps in the decision making process.
4. Classify the five types of decisions the farmer faces.
5. Explain the five knowledge situations involved in the decision making process.
6. Demonstrate the ability to make agricultural management decisions. (Assignment Sheets #1, 2, 3, 4, and 5)

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and turn in to instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

    TM 1 - Decision Making Process

    TM 2 - Knowledge Situation Worksheet

    TM 3 - Sick Chicken Syndrome

INSTRUCTIONAL MATERIALS

4. Assignment Sheets

    #1 - Values Worksheet

    #2 - Listing of One Month Decisions

    #3 - Major Decision Worksheet

    #4 - Alternatives in a Decision

    #5 - Community Survey

5. Answers to Assignment Sheets

6. Test

7. Answers to Test

References:

1. Farm Management Principles, Budgets, Plans, Herbst, Stripes Publishing Co., 10-12 Chester St., Champaign, Illinois 61820, 1976.

2. Farm Business Management, Castle, Becker, & Smith, Macmillan Co., New York, New York, 10022, 1972.

3. Decision Making and Management for Farm and Home, Malone and Malone, Iowa State University Press, 1958 (out of print).

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

INFORMATION SHEET

I. Factors In Decision Making

   A. Major - selecting the livestock system

   B. Minor - brand of chemical to buy

   C. Once in a lifetime - buying a farm

   D. Daily - clothes to wear

   E. Collection of continuing data - grain marketing

   F. Depend on other forces - crop harvest depends on weather

II. Strategy For Decision Making

   A. Reduce number of daily decisions

   B. Provide for collection of data to compare alternatives

   C. Provide heirarchy - from the least to most important

III. Basic Steps In The Decision Making Process (TM 1)

   A. Define problem - narrowed down and specific

   B. Gather facts - records provide data - Make possible use of computers

   C. Analyze alternatives - include pluses and minuses

   D. Select course of action

      1. Farmer needs courage to act

      2. Opportunity may be lost

   E. Evaluate results

      1. Records provide a continuing source of data

      2. Review for future change

INFORMATION SHEET

IV. Decision Classification

- A. Important - require more consideration
- B. Frequent - daily; may be cumulative
- C. Penalty for waiting
    - 1. May reduce profit
    - 2. Lost opportunity
- D. Revocability
    - 1. Can't back out
    - 2. Too expensive to drop
- E. Available alternative
    - 1. May be go or no go
    - 2. Complex need to be narrowed

V. Knowledge Situations Involved In Decision Making (TM 2)

- A. Subjective uncertainty
    - 1. Inactive - isn't willing to put forth effort or price is too high
    - 2. Learning - willing and able
    - 3. Forced action - decision must be made regardless of data available
- B. Subjective risk - recognizes risk and still willing to act
- C. Subjective certainty - practice known and observed to be successful

VI. Assignment Sheets Provide Techniques To Practice Decision Making

VII. Coordinate Decision Making With "Case" Farm Budget

DECISION MAKING PROCESS

1. DEFINE THE PROBLEM -

2. DIG OUT THE FACTS -

3. ANALYZE ALTERNATIVES -

4. SELECT A COURSE OF ACTION -

5. PUT YOUR DECISION INTO ACTION -

6. EVALUATE THE RESULTS -

KNOWLEDGE SITUATION WORKSHEET

A. SUBJECTIVE UNCERTAINTY

1. INACTIVE -

2. LEARNING -

3. FORCED ACTION -

B. SUBJECTIVE RISK -

C. SUBJECTIVE CERTAINTY -

SICK CHICKEN SYNDROME

NEEDED — A DECISION - MAKING SYSTEM

BILL WAS TALKING ABOUT TWO OF HIS NEIGHBORS. "JEFF IS A FINE NEIGHBOR," HE SAID, "COULDN'T ASK FOR A BETTER ONE. TOO BAD HE DOESN'T DO AS WELL FOR HIMSELF AND HIS FAMILY AS HE DOES FOR OTHERS. THE TROUBLE WITH JEFF," HE WENT ON, "IS THAT HE LETS LITTLE THINGS GET IN THE WAY OF BIG THINGS. WHY, IF HE HAS A SICK HEN, HE SPENDS HALF A DAY TRYING TO DOCTOR IT WHEN MOST LIKELY IT WILL DIE ANYWAY." BILL PAUSED TO REFLECT. "THAT'S WHERE HENRY HAS IT OVER HIM SO MUCH. HE WILL CHOP OFF THE HEN'S HEAD IN A MINUTE AND GO OUT AND MAKE TEN DOLLARS IN THE HALF DAY DOING SOMETHING IMPORTANT. HE KNOWS WHEN A THING ISN'T WORTH FOOLIN' WITH."

...HE LETS LITTLE THINGS GET IN THE WAY OF BIG THINGS.

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

ASSIGNMENT SHEET #1: Values Worksheet

Study the impact that values had on decisions. During one week when time is available make a list of decisions you have made. Put down a reason for the choice selected based on your set of values. (Refer to Assignment Sheet #3 in SA U1-12.)

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

ASSIGNMENT SHEET #2: Listing of One Month Decisions

Prepare a list of decisions you feel will be coming up in the next month. Separate those requiring additional information from those to be decided based on the time they are made.

Additional information required -

Depends on the time -

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

ASSIGNMENT SHEET #3: Major Decision Worksheet

Select a major decision to be made soon. List data or information that is available on past experience. List things needed to be considered on which the future will have an impact. Visit someone putting up a new building. Interview them on the length of time spent planning, the data they used in the decision making process, and the opinions they sought in making their decision.

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

ASSIGNMENT SHEET #4: Alternatives in a Decision

Select a typical decision made by farmers such as trading for a new implement. List the alternatives they have in their decision making process.

Example____

Alternatives:

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

ASSIGNMENT SHEET #5: Community Survey

Make a survey of your community and try to find an example of an error in decision making in the following categories:

1. Risk not considered sufficiently -

2. Lack of planning -

3. Failure to consider outside influences -

4. Failure to use trained or professional services -

5. Lack of information -

6. Lack of family discussion before a decision was made -

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

1. Bought a registered herd bull.
   Values considered: Pride in owning livestock that consistently tops the market.
   Know need for genetic purity as an influence on profitability. (Educational Background)

2. Decided to overhaul the hay swather instead of trade for a new one. Fancy machinery to keep up with neighbors wasn't important. Self discipline saw the need to keep machinery investment at a lower level. Has reputation (well earned) of being a good mechanic. Felt need for capital was greater in family living features such as laundry or cooking equipment.

3. Took time to clean up the junk pile instead of going to a farm sale. Pride of appearance of the farmstead was high. Needed to have scrap iron better sorted for future use in machines and equipment repair. Purchases at farm sale might not be really needed. (Self-discipline)

4. Spent time teaching children the value of a neat farmstead. Shared family love by working together. Developed pride by pointing out the end result. Shared the idea of reduced outlays for other forms of recreation.

Assignment Sheet #2

Additional information -

> Should we treat our early maturing milo with acid for storage so we can utilize higher moisture grain? Should we mow the pasture to control weeds before we spray chemicals? What weight should we finish our hogs? Should we try to buy that neighboring eighty?

Depends on the time -

> Should those terraces be built right after harvest or should we wait for some fall moisture? When should we spray pasture weeds? Should we double crop the wheat with soybeans?

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

Building a Machine Shed and Shop

1. Know how much machine storage space we need.
2. Know from useage the location that will provide the easiest access from fields.
3. Have a list of the kinds of repairs we would like to be able to make.
4. Possible additional acreage to farm will increase the amount of machinery needed to be stored.
5. Have calculated annual costs due to weather deterioration of equipment.
6. Interviewed neighbor on why he selected the building he is having put up. Found out his costs for comparative structures. Reviewed their planning procedure.

Assignment Sheet #4

Example: 8 Row Planter

1. Could buy another four row unit and build a tandem hitch.
2. Might even hire a neighbor to do all spring planting.
3. Could sell the old planter and buy the new unit at a slightly discounted price.
4. Machine investment per crop acre is $68. New planter will increase this to $84.
5. Could lease a planter at a cost 20% above ownership costs.

Assignment Sheet #5

1. Risk not considered sufficiently - A neighbor went 100% to no-til planting without experiencing a year or two of small acreage demonstration plots.

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #5 (continued)

2. Lack of planning - A neighbor bought a new combine on the basis of paying for it with custom cutting for his neighbors.

3. Failure to consider outside influences - Neighbor's soybeans frosted because he bought a variety with a longer season growth pattern.

4. Failure to use trained or professional services - A neighbor remodeled a barn into a hog farrowing house only to have ventilation problems wipe him out via disease outbreak.

5. Lack of information - A neighbor paid a high price for a dairy cow on the basis of milk given in two milkings (no DHIA records available) only to find that she was a real early peaker and didn't really have a good 305 day record.

6. Lack of family discussion - Neighbor dad bought a new stove when his wife and daughter had been saving to buy a micro-wave oven. (Old oven wasn't really the problem.)

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

TEST

1. List six factors in decision making and give an example of each.

2. List three factors to include in a strategy for decision making.

3. List the five basic steps in the decision making process.

4. Match the five types of decision with the proper description.

   _____a. It requires more consideration.

   _____b. It may be daily or accumulate.

   _____c. Profit may be reduced or opportunity lost.

   _____d. He can't back out; it may be too expensive.

   _____e. It's simply go or no go or it may be complex.

   1. Revocability
   2. Important
   3. Available alternative
   4. Penalty for waiting
   5. Frequent

5. Explain the five knowledge situations involved in decision making.

   A. Subjective uncertainty

      1) Inactive

      2) Learning

      3) Forced action

   B. Subjective risk

   C. Subjective certainty

INTRODUCTION TO FINANCIAL MANAGEMENT

UNIT II

ANSWERS TO TEST

1.
   a. Major
   b. Minor
   c. Once in a lifetime
   d. Daily
   e. Collection of data
   f. Dependent on other forces

2. a. Reduces the number of daily decisions
   b. Provides for collection of data to compare alternatives
   c. Provides a heirarchy of decisions from the least to the most important

3. a. Define the problem
   b. Gather facts
   c. Analyze alternatives
   d. Select a course of action
   e. Evaluate the results

4. a. 2
   b. 5
   c. 4
   d. 1
   e. 3

5. **A.** Subjective uncertainty
   1) Inactive - unwilling to put forth effort or pay the price

ANSWERS TO TEST

2) Learning - willing to put forth effort and pay the price

3) Forced action - decision must be made regardless of how little data is available

B. Subjective risk - knows the risk, yet is willing to act

C. Subjective certainty - the practice is known and observed to be successful

6. Complete the Assignment Sheets to the satisfaction of the instructor.

FARM BUSINESS ARRANGEMENT

UNIT I

PROPRIETORSHIP

TERMINAL OBJECTIVE

Upon completion of this unit, students will be able to name and identify the types of farm business arrangements that could be of benefit to them. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Define proprietorship.
2. Identify five advantages of sole proprietorship.
3. Identify four disadvantages of sole proprietorship.
4. Identify five problems in capitalization and expansion under sole proprietorship.
5. Identify those qualities needed by an ownership individual to succeed in the farm business.
6. List the methods available in establishing the ownership of a farm business.

FARM BUSINESS ARRANGEMENT

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Sheets
3. Discuss Terminal and Specific Objectives
4. Discuss Information Sheets
5. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Test
4. Answers to Test

References:

1. Doane Agricultural Report, Doane Agricultural Service, 8900 Manchester Road, St. Louis, Missouri 63144, monthly.
2. Doyen, Lee, Credit and Finance, 4th Ed., Cloud County Community College, Concordia, Kansas 66901, 1979.
3. Kansas Laws for Farm Landlords and Tenants, Cir. 384, Kansas Agriculture Experiment Station, Manhattan, Kansas, 1974.

INSTRUCTIONAL MATERIALS

References (continued):

4. Nelson, Lee and Murray, Agricultural Finance, 6th Ed., Iowa State University Press, Ames, Iowa, 1973.

5. Partnership as a Farm Business Arrangement, Part II, Cir. 590, Cooperative Extension Service, Kansas State University, Manhattan, Kansas, 1978.

6. Wolf, Harold, Personal Finance, 5th Ed., Allyn and Bacon, Inc., Boston, Massachusetts 02210, 1978.

FARM BUSINESS ARRANGEMENT

UNIT I

INFORMATION SHEET

I. Terms and Definitions

   A. Sole Proprietorship - Owner owns his own farm or business. The owner makes his own decisions and shares one hundred percent in the returns of the business.

II. Five Advantages of Sole Proprietorship

   A. Easiest and quickest to enter

   B. Sole decision maker

   C. Do not have to share profit

   D. Manager more independent

   E. Less records to keep

III. Four Disadvantages of Sole Proprietorship

   A. Must have enough equity capital

   B. Operator must be a business manager

   C. Operator must like to make decisions

   D. Difficult to get started at a young age

IV. Five Problems a Young Farmer has in Capitalization and Expansion under Sole Proprietorship

   A. Will need to be able to lease additional land

   B. May need to work as hired hand to save his own equity capital

   C. Finance institution will want a co-signer

   D. Young farmer may have to work with parents and use parents equipment to get some equity capital acquired

   E. May have to have an outside job to earn part or all of family living

V. Qualities Needed by an Ownership Individual to Succeed in the Farm Business

   A. Self-motivation

   B. Not afraid of long hours

INFORMATION SHEET

C. Keep a good set of records

D. Marry a women who likes the farm

E. Like to work by himself

F. Be able to overcome adversities

G. Set short and long range goals

H. Set up a budget and live within it

I. Honest

VI. List the Methods Available in Establishing the Ownership of a Farm Business

A. Inheritance

B. Gifts

C. Savings

D. Leasing

E. Contracts

F. Borrowing

G. Marry into wealth

FARM BUSINESS ARRANGEMENT

UNIT I

TEST

1. Define proprietorship:

2. Identify five advantages of sole proprietorship

   a.

   b.

   c.

   d.

   e.

3. What are four disadvantages of sole proprietorship?

   a.

   b.

   c.

   d.

4. What are five problems a young farmer in capitalization and expansion under role proprietorship.

   a.

   b.

   c.

   d.

   e.

5. What are eight qualities a young man will need to succeed in an individual ownership of the farm business.

   a.
   b.
   c.
   d.
   e.
   f.

TEST

g.

h.

6. Seven methods available for a young man to establish ownership of farm business

a.

b.

c.

d.

e.

f.

g.

FARM BUSINESS ARRANGEMENT

UNIT I

ANSWERS TO TEST

1. Owner owns his own farm or business. The owner makes his own decisions and shares one hundred percent in the return of the business.

2. a. Easiest and quickest to enter

   b. Sole decision maker

   c. Do not have to share profit

   d. Manager more independent

   e. Less records to keep

3. a. Must have enough equity capital

   b. Operator must be a business manager

   c. Operator must like to make decisions

   d. Difficult to get started at a young age

4. a. Will need to be able to lease additional land

   b. May need to work as a hired hand to save his own equity capital

   c. Finance institution will want a co-signer

   d. Young farmer may have to work out an arrangement with parents to use parents machinery

   e. May need an outside job to earn part of family living

5. a. Self-motivation

   b. Not afraid of long hours

   c. Keep a good set of records

   d. Marry a woman who likes the farm

   e. Likes to work by himself

   f. Be able to overcome adversities

   g. Set short and long range goals

   h. Set up a budget and live within it

   i. Honest

ANSWERS TO TEST

6. a. Inheritance
   b. Gifts
   c. Savings
   d. Leasing
   e. Contracts
   f. Borrowing
   g. Marry into wealth

FARM BUSINESS ARRANGEMENT

UNIT II

PARTNERSHIP OR CORPORATION

TERMINAL OBJECTIVE

Upon completion of this unit, students will be able to name and identify the types of farm business arrangements that could be of benefit to them. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms with their definitions concerning a partnership and corporation.
2. Identify the four advantages of a partnership.
3. Identify the four disadvantages of a partnership.
4. Identify the six advantages of a corporation.
5. Identify the seven disadvantages of a corporation.
6. Identify those qualities needed by the members in the order a partnership or corporation to succeed.
7. List the five steps to incorporate.

FARM BUSINESS ARRANGEMENT

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Sheets
3. Discuss Terminal and Specific Objectives
4. Discuss Information Sheets
5. Locate farm business for a field trip that is operating as a partnership and one that is a corporation
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Test
4. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. Doane Agricultural Report, Doane Agricultural Service, 8900 Manchester Road, St. Louis, MO 62144, monthly.

2. Doyen, Lee, Credit and Finance, 4th Ed., Cloud County Community College, Concordia, KS 66901, 1979.

3. "The Farm Corporation", Successful Farming, March, April, May, 1977, Meredith Publishing Co., 1716 Louis St., Des Moines, Iowa 50336.

4. "Farming and Ranching", PCA Farming, Ag. Business Journal, 1233 Janesville Ave., Fort Athinson, WI 52538, November, December, 1978, Vol. 22, No. 2.

5. Iowa State University Cooperative Extension Service. The Farm Corporation. pm 273, Ames, IO, 1970.

6. Koenig, Levi and Hagan, Should You Incorporate Your Farm? Cooperative Extension Service, University of Missouri, Columbia, MO 65201.

7. Nelson, Lee and Murray, Agricultural Finance, 6th Ed., Iowa State University Press, Ames, IO, 1973.

8. Partnership as a Farm Business Arrangement, Part II, Cir. 590, Cooperative Extension Service, Kansas State University, Manhattan, KS, 1978.

FARM BUSINESS ARRANGEMENT

UNIT II

INFORMATION SHEET

I. Terms and Definitions

   A. Limited Partnership - A special form of partnership permitted by state law where the liability of one or more partners for partnership debts and obligations is limited to their investment in the business. A limited partnership must have at least one general partner who handles the management of the business and is fully liable for all partnership debts and obligations.

   B. General Partnership - An aggregation of owners. Two or more persons contribute their assets to the business and share with each other the management responsibilities, profit and losses.

   C. Corporation - Is a legal entity authorized by state law and is capable of doing business, making contracts, borrowing money and the like, the same as an individual proprietor.

   D. Subchapter S Corporation or Pseudo Corporations - The portion of the Internal Revenue Code containing the rules for tax--option tax status for corporations that qualify. Ordinarily, Subchapter S Corporation does not pay income tax; corporate net income is taxed to the shareholder in the same percentage as they own stock in the corporation.

   E. Entity - Independent, separate, or self-contained existence; something that has separate and distinct existence and objective as conceptual reality.

II. The Four Advantages of a Partnership

   A. Pooling of resources

   B. Increase borrowing capacity

   C. Share in decision-making

   D. Can acquire use of more outside equity capital

III. The Four Disadvantages of a Partnership

   A. Automatically terminates upon death of one of the partners

   B. Liability of the partners

- C. Each partner reports share of income or loss, capital gains and losses as an individual
- D. Compatibility of partners

IV. The Six Advantages of a Corporation

- A. Liability limited only for what each stockholder has in corporation
- B. Ease of transfer of property upon death
- C. Tax savings
- D. Legal person separate from shareholder
- E. Employee benefits for owner
- F. More capital to work with

V. The Seven Disadvantages of a Corporation

- A. Minor stockholders have little power
- B. More record keeping involved
- C. Corporation fees
- D. Legal expenses
- E. Kansas Farm Grain Corporation limited to 10 shareholders and to 5,000 acres
- F. Must hold annual meetings
- G. Officers may lack management ability

VI. The Qualities Needed by Members to Make a Partnership or Corporation Succeed

- A. Goals of all participants, including the spouses, should be compatible
- B. They should be capable of getting along together and respecting each others judgment
- C. The business must be large enough to provide adequate living for all parties
- D. Good records, sound management, and common sense in the handling of money
- E. Written agreement

INFORMATION SHEET

VII. The Seven Steps to Incorporate

- A. Pre-incorporation agreement
- B. Subscription agreement
- C. Filing the articles of incorporation
- D. Payment for shares
- E. Meeting of shareholders
- F. Adoption of by-laws of the corporation
- G. First meeting of board of directors

TYPES OF FARM BUSINESS ARRANGEMENTS

UNIT II

PARTNERSHIP OR CORPORATION

TEST

1. Match:

____a. Limited Partnership

____b. General Partnership

____c. Corporation

____d. Subchapter S Corporation

____e. Entity

1. Association of two or more persons doing business together to make a profit and share management responsibilities.

2. Independent something that has separate and distinct experience.

3. Do not pay income tax as corporation, but net income is taxed to shareholder.

4. Debts and obligations are limited to their investment in the business.

5. Is a legal entity authorized to do business the same as an individual proprietor.

2. List the advantages of a partnership:

a.

b.

c.

d.

3. List the disadvantages of a partnership:

a.

b.

c.

d.

TEST

4. List the advantages of a corporation:

   a.

   b.

   c.

   d.

   e.

   f.

5. List the disadvantages of a corporation:

   a.

   b.

   c.

   d.

   e.

   f.

   g.

6. What qualities are needed by the members to make a partnership or corporation succeed?

   a.

   b.

   c.

   d.

   e.

TEST

7. List the seven steps to incorporate:

   a.

   b.

   c.

   d.

   e.

   f.

   g.

FARM BUSINESS ARRANGEMENT

UNIT II

ANSWERS TO TEST

1. a. 4
   b. 1
   c. 5
   d. 3
   e. 2

2. a. Pooling of resources
   b. Increase borrowing capacity
   c. Share in decision-making
   d. Can acquire use of more outside equity capital

3. a. Automatically terminates upon death of one of the partners
   b. Liability of the partners
   c. Each partner reports share of income or loss, capital gain and losses as an individual
   d. Compatibility of partners

4. a. Liabiltiy limited only for what each stockholder has in corporation
   b. Ease of transfer of property upon death
   c. Tax savings
   d. Legal person separate from shareholder
   e. Employee benefits for owner
   f. More capital to work with

ANSWERS TO TEST

5. a. Minor stockholders have little power

   b. More record keeping involved

   c. Corporation fees

   d. Legal expenses

   e. Kansas farm grain corporation limited to 10 shareholders and to 5,000 acres

   f. Must hold annual meetings

   g. Officers may lack management ability

6. a. Goals of all participants; including the spouses, should be compatible

   b. They should be capable of getting along together and respecting each others judgment

   c. The business must be large enough to provide adequate living for all parties

   d. Good records, sound management, and common sense in the handling of money

   e. Written agreement

7. a. Pre-incorporation agreement

   b. Subscription agreement

   c. Filing the articles of incorporation

   d. Payment for shares

   e. Meeting of shareholders

   f. Adoption of by-laws of the corporation

   g. First meeting of board of directors

FARM BUSINESS ARRANGEMENT

UNIT III

LEASING ARRANGEMENTS

TERMINAL OBJECTIVE

Upon completion of this unit, students will be able to identify the types of farm business leasing arrangements that could be of benefit to them. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms with their definitions concerning farm leasing arrangements.
2. Identify the five advantages of cash rent.
3. Identify the two disadvantages of cash rent.
4. Identify the five advantages of crop share lease.
5. Identify the four disadvantages of crop share lease.
6. Identify the five advantages of livestock share lease.
7. Identify the four disadvantages of livestock share lease.
8. Identify the advantages of using written contracts.
9. Identify the advantages of a written agreement over an oral agreement.
10. Identify the six items needed in developing and testing for fairness in an irrigation lease.
11. Identify the nine tests of a good irrigation lease.

FARM BUSINESS ARRANGEMENT

UNIT III

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Discuss Terminal and Specific Objectives
4. Discuss Information and Assignment Sheets
5. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Assignment Sheets

   #1 - Some Important Provisions of a Farm Lease

   #2 - Student with Irrigated Land-Fill Out the Kansas Irrigation Crop Share as Crop - Share - Cash Lease form, page 16. (Bulletin MF429, Irrigation Lease Development and Testing)
4. Test
5. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. Buying and Selling Farms by Contract in Kansas. Kansas Agricultural Experiment Station, Cir 390, 1965.
2. Cash Farm Rental Rates in Kansas. Kansas Agricultural Experiment Station, Kansas State University, Manhattan, KS, Bulletin 594, 1976.
3. Doane Agricultural Report. Doane Agricultural Service, 8900 Manchester Road, St. Louis, MO 63144, monthly.
4. Doyen, Lee. Credit and Finance. 4th Ed., Cloud County Community College, Concordia, KS 66901, 1979.
5. "Farming and Ranching", PCA Farming, Ag. Business Journal, 1233 Janesville Ave., Fort Athinson, WI 52538, November, December, 1978, Vol. 22, No. 2.
6. Irrigation Lease Development and Testing. MF 429, Cooperative Extension Service, Kansas State University, Manhattan, KS, 1976.
7. Kansas Crop - Share as Crop - Share Cash Farm Lease. MF 426, Cooperative Extension Service, Kansas State University, Manhattan, KS, 1976.
8. Kansas Laws for Farm Landlords and Tenants. Cir. 384, Kansas Agriculture Experiment Station, Manhattan, KS, 1974.
9. Nelson, Lee and Murray. Agricultural Finance. 6th Ed., Iowa State University Press, Ames, IA, 1973.
10. Wolf, Harold. Personal Finance. 5th Ed., Allyn and Bacon. Inc., Boston, 02210, 1978.

FARM BUSINESS MANAGEMENT

UNIT III

INFORMATION SHEET

I. Terms and Definitions

A. Leasing - A lease is essentially a capital transfer agreement that gives the lessee (user) control over assets owned by the lessor for a specific period of time for an agreed-upon payment (usually referred to as rent).

B. Crop-share lease - The landlord usually provides the land and improvements and pays related taxes and other expenses, while tenant pays most of the operating expenses and furnishes power, machinery, labor and livestock. Some expenses such as seed and fertilizer may be shared with the landlord. Crops produced are shared as agreed upon in the lease.

C. Livestock-share lease - The tenant and landlord customarily share both crop and livestock production, as well as some of the expenses. The landlord usually furnishes the land, buildings, and other improvements; the tenant and landlord commonly own the livestock jointly and share the annual expenses of crop and livestock production. The livestock is most often owned on a 50-50 basis, and expenses and income are shared in the same proportions.

D. Cash lease - The landlord is paid a specified cash payment and usually furnishes the land, buildings and other improvements. The tenant furnishes all other items required for production, including labor, machinery, livestock and operating expenses. The entire production of crops and livestock belongs to the tenant.

E. Machinery lease - Equipment leases are classified mainly on the basis of the term of the control and the services provided.

F. Custom hiring - Is an operating lease arrangement whereby the owner of the equipment furnishes the machine operator in addition to covering all operating expenses.

G. Full service lease - Is an operating lease contract under which the lessor assumes total responsibility for all repairs and maintenance costs.

H. Contract - Two or more people enter into an agreement. The contract spells out in detail what each ones responsibility is in the contract.

INFORMATION SHEET

I. Vertical coordination - The linking of two or more stages in the chain of production.

J. Vertical integration - Where two or more firms are merged into one ownership and management unit.

K. Operating lease - Is a short term contract - the term ranging anywhere from a few hours to two or three growing seasons; under operating lease the farm operator leases the equipment by the hour, day, week, month or year. Normally, the lessor is responsible for insurance, taxes, and major repairs and the lessee covers variable operating expenses such as fuel, lubricants, and routine maintenance.

L. Oral lease - Verbal agreement between landlord and tenant.

II. The Five Advantages of Cash Rent

A. Can make all management decisions

B. Receive 100 percent of crop

C. Easier to store grain

D. Less records to keep

E. Landlord easier to satisfy

III. The Two Disadvantages of Cash Rent

A. Need cash to pay rent at beginning of lease

B. Lessee has all risk

IV. The Five Advantages of Crop Share Lease

A. Lessee can gain control of more non-equitable capital than he can purchase on his own

B. Lessee can operate larger business

C. Lessor and lessee share part of the risk

D. Lessor still has opportunity to make management decisions

E. Allow young farmer a chance to get established with less capital

INFORMATION SHEET

V. The Four Disadvantages of Crop Share Lease

   A. Lessor may want too large share of crop

   B. Lessor may be too dictatorial

   C. Lessor and lessee may not get along

   D. More records to keep

VI. The Five Advantages of Livestock Lease

   A. Allow young farmers to get started in farming

   B. Lessor can help provide young farmer with management decisions

   C. Allow lessor to continue to be active longer in farm business

   D. Lessee can get started into farming with less capital

   E. Allow whole farm to be utilized more efficiently

VII. The Four Disadvantages of Livestock Lease

   A. Lessor may be too dictatorial

   B. Lessor and lessee may not be compatible

   C. More farm records to keep

   D. Living conditions may not be adequate

VIII. The Four Advantages of Written Contracts

   A. Less chance for misunderstandings

   B. Lessor and lessee know for sure what each is accountable for

   C. Can be made for longer periods of time

   D. Long range plans can be made with more certainty

IX. The Five Advantages of a Written Agreement over an Oral Agreement

   A. People are forgetful unless information written down

   B. Can be made for longer periods of time

   C. Lessee can plan for longer periods of time

   D. Lessor and lessee know for sure what each is accountable for

   E. Less chance of misunderstanding

INFORMATION SHEET

X. Identify the Six Items Needed in Developing and Testing for Fairness in an Irrigation Lease

- A. Value of land
- B. Value of irrigation components
  - 1. Land development
  - 2. Well
  - 3. Pump, gear head, pipe
  - 4. System (pivot or gated pipe)
- C. Value of crop machinery
- D. Value of labor
- E. Value of management
- F. Cost of variable inputs to production. (To be perfectly equitable under varying yields, all variable costs must be shared in the same ratio as the contribution of each parties fixed costs are to the total costs.)

XI. Identify the Nine Tests of a Good Irrigation Lease

- A. Does the lease encourage the most profitable long time operation of this farm?
- B. Does it encourage use of the best amount of capital of different kinds by both parties?
- C. Does the lease encourage a tenant to operate the farm in the same way a well financed owner-operator would run it?
- D. Are returns to landlord and tenant shared in the same proportion as the contributions each makes to the business?
- E. Are the best available farming methods used?
- F. Are soil productivity and useful improvements maintained?
- G. Is there a plan available to obtain new and needed **improvements?**
- H. Is the lease in writing?
- I. Does the lease clearly state the sharing of income and all expenses and give adequate legal protection to both parties?

FARM BUSINESS ARRANGEMENT

UNIT III

ASSIGNMENT SHEET #1 - SOME IMPORTANT PROVISIONS OF A FARM LEASE

Some important provisions of a farm lease to be checked by the student for their home farm operation.

A. Time and specification and designation of parties

1. Date of making lease ____________________
2. Date lease becomes effective ____________________
3. Term of lease ____________________
4. Name and address of landlord (and spouse) ____________________
5. Name and address of tenant (and spouse) ____________________

B. Description of farm

1. Name and location of farm (legal description desirable) ____________________ ____________________
2. Number of acres in farm ____________________
3. Buildings and other improvements ____________________
4. Reservations or exceptions of any part of premises for benefit of landlord, as for example--occupancy of home, hunting and fishing rights, removal of gravel, hauling of water, oil and mineral rights, or use of buildings for landlord's storage ____________________ ____________________ ____________________ ____________________

C. Other resources - provided separately or shared

1. Machinery and equipment ____________________
2. Livestock ____________________
3. Fertilizer, seed, repairs, etc. ____________________
4. Labor ____________________

D. Rent to be paid

1. Cash, share, or both ____________________
2. Time of payment ____________________

ASSIGNMENT SHEET #1

E. Signatures and acknowledgment

   1. Signatures of landlord (and spouse) ____________________

   2. Signatures of tenant (and spouse) ____________________

   3. Notarization if recording is desired ____________________

F. Other desirable provisions

   1. Subleasing ____________________

   2. Maintenance of improvements ____________________

   3. Farm programs ____________________

   4. Conservation measures ____________________

   5. Transfer of farm ____________________

FARM BUSINESS ARRANGEMENT

UNIT III

ASSIGNMENT SHEET #2

Kansas Irrigation Crop-Share or Crop-Share-Cash Farm Lease

KFL-5 (November 1976)

The **KANSAS FARM LEASE** form can provide the landlord and tenant with a guide for developing an agreement to fit their individual situation. It is not intended that this form be used without modification to adapt to the individual farm business. Nor is this form intended to take the place of legal advice pertaining to contractual relationships between the two parties. Because of the possibility that a farm operating agreement may be legally considered a partnership under certain conditions, seeking proper legal advice is recommended when developing such an agreement.

THIS LEASE is entered into this ____________________ day of ____________________, 19_____,

between ______________________________, landlord, of ______________________________
(husband) (address)

______________________________ ______________________________
(wife) (address)

and ______________________________, tenant, of ______________________________
(husband) (address)

______________________________ ______________________________
(wife) (address)

A. PROPERTY DESCRIPTION

The landlord hereby leases to the tenant, to occupy and use for agricultural and related purposes, the following described property:

____

____

____

____

____

and consisting of approximately __________ acres situated in ____________________ County Kansas and on any other land which the landlord may designate by mutual written agreement.

B. TERMS OF LEASE

1. Term.—(If a continuing lease is desired, use paragraph (a) and strike out (b).

(a) **Continuing Lease**—The term of the lease shall be __________ year(s), commencing on the __________ day of ______________, 19_____, and shall continue in effect from year to year thereafter (as an annual lease) unless written notice of termination is given by either party to the other at least __________ days prior to expiration of this lease or the end of any year of continuation. (Three to six months' notice is desirable. The law requires only 30 days. If a definite term is desired, use paragraph (b) and strike out paragraph (a). No notice of termination is necessary if paragraph (b) is used.)

(b) **Annual Lease**—The term of this lease shall be __________ year(s), commencing on the __________ day of______________, 19_____, and ending on the __________ day of ______________, 19_____.

2. Review of lease.—A request for general review of the lease may be made, by either party, at least __________ days prior to the final date for giving notice to terminate the lease.

3. Amendments.—Amendments and alterations to this lease shall be in writing.

4. No partnerships created.—This lease shall not be deemed to give rise to a partnership relation, and neither party shall have authority to obligate the other without written consent, except as specifically provided in this lease.

5. Extent of agreement.—The terms of this lease shall be binding upon the heirs, executors, administrators, and successors of both landlord and tenant in like manner as upon the original parties, except as provided by mutual written agreement otherwise.

6. Transfer of property.—If the landlord should sell or otherwise transfer title to the farm, he will do so subject to the provisions of this lease.

7. Right of entry.—The landlord reserves the right of himself, his agents, his employees, or his assigns to enter the farm at any reasonable time for purposes (a) of consultation with the tenant; (b) of making repairs, improvements, and inspections; and (c) after notice of termination of the lease is given, of plowing, seeding, fertilizing, and such customary seasonal work, none of which is to interfere with the tenant in carrying out regular farm operations.

8. Additional agreements regarding term of lease:

____

____

____

____

____

____

C. LAND USE

1. Land.—The land will be used in approximately the following manner subject to annual written agreement by both parties:

(a) Cropland	__________ Acres
(1) Corn	__________ Acres
(2) Grain Sorghum	__________ Acres
(3) Wheat	__________ Acres
(4) Sugar Beets	__________ Acres
(5) Silage	__________ Acres
(6) Alfalfa	__________ Acres
(b) Other:	
____________________	__________ Acres
____________________	__________ Acres
____________________	__________ Acres
TOTAL ACRES	__________ Acres

2. Silage.—The maximum acres planted and harvested as silage shall be __________ acres.

D. IMPROVING, CONSERVING, AND MAINTAINING THE FARM

To improve the farm, conserve its resources, and maintain it in a high state of cultivation, the two parties agree as follows:

1. General maintenance.—The tenant will maintain the farm during his tenancy in as good condition as at the beginning, normal wear and depreciation and damage from causes beyond the tenant's control excepted.

ASSIGNMENT SHEET #2

2. Cropping practices.—The tenant will not, without oral consent of the landlord, (a) plow permanent pasture or meadowland, (b) cut live trees for sale or personal uses, but will take for fuel or use on the farm only dead or unmarketable timber designated by the landlord, (c) pasture new seedings of legumes or grasses in the year they are seeded, and (d) the tenant will spread the manure, straw, or other crop residues on the farm.

3. Fire protection—The tenant will not, without written consent of the landlord, house automobiles, motortrucks, or tractors in barns, or otherwise violate restrictions in the landlord's insurance policy which restrictions the landlord shall make known to the tenant.

4. Replace losses.—The landlord will replace or repair as promptly as possible the dwelling or any other building that may be destroyed or damaged by fire, flood, or other cause beyond the control of the tenant or make rental adjustments in lieu of replacements.

5. Noxious weeds.—The tenant will use diligence to prevent noxious weeds from going to seed on the farm. Treatment of noxious weed infestation and cost thereof shall be handled as follows:

6. Maintenance of improvements.—The tenant will keep the buildings, fences, and other improvements on the farm in as good repair and condition as they are when he takes possession, and in as good repair and condition as they may be put during the term of the lease, ordinary wear and tear, loss by fire, or unavoidable depreciation or destruction excepted.

7. Materials and labor.—The landlord will furnish materials and the tenant will perform labor for normal maintenance and repairs, except that skilled labor which the tenant himself is unable to perform satisfactorily will be furnished by the landlord. Additional agreements regarding materials and labor:

8. Purchase of materials.—The tenant may buy, without further authorization, materials for normal maintenance and repairs in a total amount not to exceed $__________ within each year, and the landlord will credit or reimburse the tenant for such expenditures as follows:

9. Add improvements.—The tenant will not, without written consent of the landlord, (a) erect or permit to be erected on the farm any nonremovable structure or building, or (b) incur any expense to the landlord for such purposes, or (c) add electrical wiring, plumbing, or heating to any buildings, or if consent is given, he will make such additions meet standards and requirements of power and insurance companies.

10. Conservation practices.—The tenant will control soil erosion as completely as practicable.

11. Conservation structures.—The tenant will keep in good repair all terraces, open ditches, inlets and outlets of tile drains, preserve all established watercourses or ditches including grass waterways when seeded by the landlord, and refrain from any operation or practice that will injure them.

12. Compensation for improvements.—The two parties will carry out new conservation practices and measures and make other improvements, and share contributions and costs necessary for completing such practices and improvements as set forth below. The tenant will be reimbursed by the landlord when the practice, measure or improvement is completed, or will be compensated for its unexhausted value when the tenant leaves the farm, according to the table below:

13. Additional agreements relative to conservation and improvements:

14. Preparing or seeding land.—When the tenant leaves the farm, if the total acreages of prepared or seeded land are greater than at the beginning of his tenancy, he will be compensated by the landlord on the basis of the value of such excess acreages. If such total acreages are less than at the beginning of his tenancy, the tenant will compensate the landlord on the basis of the value of such deficiency, provided that the deficiency is not due to drought, flood, or other causes beyond the control of the tenant. The acreages at the beginning of this tenancy and the basis of payment are as follows:

Prepared or Seeded	Acres at Beginning	Rate Per Acre

Compensation for Improvements Table. (See paragraph D-12 above)

Conservation Practice, Measure or Other Improvement	Date to Be Completed	Estimated Cost (Dollars)	Percent to be Furnished by Landlord and by Tenant						Value Placed on Tenants Contribution (Dollars)	Rate of Annual Depreciation (Percent)
			Materials		Labor		Machinery			
			L	T	L	T	L	T		
Irrigation Well		$							$	
Underground Pipe		$							$	
Land Development		$							$	
Tailwater Structure		$							$	
Gas Line		$							$	
Other		$							$	
		$							$	

15. Removable improvements.—Minor improvements of a temporary or removable nature, not provided for in item 12 of this section, which do not mar the condition or appearance of the farm may be made by the tenant at his own expense. The tenant may at any time this lease is in effect, or within 60 days thereafter, remove such improvements, provided he leaves in good condition that part of the farm from which they are removed.

16. Compensation for damages.—When the tenant leaves the farm, he will pay the landlord reasonable compensation for any damages to the farm for which the tenant is responsible except ordinary wear and depreciation and damages beyond the tenant's control.

E. SHARING COSTS AND RETURNS

All costs and returns shall be divided between landlord and tenant as provided below, unless otherwise specifically stated elsewhere in this lease.

1. Rental rates.—The tenant agrees to pay as rent the shares or quantities of crops and cash as indicated below:

Crop	Acres	% Share of Crop	Cash Rent	Place of Sale or Delivery of Landlord's Share	Date and Condition of Sale Delivery or Payment
			xxxx		
			xxxx		
			xxxx		
			xxxx		
			xxxx		
			xxxx		
			xxxx		
Farm Bldg(s).	xxxxx	xxxxx	$______		
Dwelling	xxxxx	xxxxx	$______		
Timber & Waste	______	xxxxx	$______		
Pasture	______	xxxxx	$______		
TOTAL CASH RENT			$______		

2. Additional agreements in regard to rental rates.

____

____

____

____

3. Cropping and Irrigation Expenses.—These expenses shall be shared as follows:

	% Landlord		% Tenant			% Landlord		% Tenant	
IRRIGATION	Labor	Material	Labor	Material	CROPPING	Labor	Material	Labor	Material
Well Repairs					Fuel				
Pump Repairs					Fertilizer				
Gear Head Rep.					Lime				
Power Unit Rep.					Mach. Rep.				
System Repairs					Eq. Rep.				
Land Maint.					Bldg. Ins.				
Irrigation Fuel					Crop Ins.				
Power Replace.					Seed				
System Replace.					Harvesting				
Labor					Drying				
					Hauling				
					Herbicides				
					Insecticides				
					Other				

4. Cash expenses.—The annual production expenses paid by tenant or landlord shall be reconciliated no later than __________ day of __________ month each year and any balance due either party shall become due and payable no later than __________ weeks following said reconciliation.

5. Cash rental payment.—The annual rental due shall be paid as follows: $__________ on or before __________ day __________ month with interest at ________ percent annum after due date until paid.

6. Taxes.—Taxes will be paid by the party owning said item unless listed differently in this lease.

7. Depreciation on irrigation.—Items such as tailwater pits, wells, and irrigation equipment will be claimed by the party paying for the item in question.

8. Rental adjustments.—Additional agreements in regard to rental payment:

____

____

____

9. Tenant return of capital for permanent improvements.—(also see D12): In the event the tenant installs permanent improvements on the land, he may deduct from the landlord's crop share each year no more than _______%. The value to be applied shall be the landlord's customary market at harvest. The value will be deducted from the permanent improvement cost and credited to the tenant as follows: Any remaining balance upon termination of this lease by either party will be paid by the landlord to the tenant.

F. MISCELLANEOUS PROVISIONS

1. Government program.—The farm will be operated in compliance with governmental programs as follows:

____

____

____

____

2. Debts and accidents.—Each party agrees that the other party shall in no way be responsible for the debts of, or liable for accidents or damages caused by the other party.

3. Additional agreements:

____

____

____

____

G. ARBITRATION OF DIFFERENCES

Any differences between the parties as to their several rights or obligations under this lease that are not settled by mutual agreement after thorough discussion shall be submitted for arbitration to a committee of three disinterested persons, one selected by each party hereto and the third by the two thus selected; and the committee's decision shall be accepted by both parties. The Kansas Uniform Arbitration Act (K.S.A. 1974 Supp. 5-401 to 5-422) governs any difference not included in the agreement.

Tenant Return of Capital Table

	Improvement	Year Constructed	Original Costs	Credit Year 1	Balance	Credit Year 2	Balance	Credit Year 3	Balance
1			$	$	$	$	$	$	$
2			$	$	$	$	$	$	$
3			$	$	$	$	$	$	$
4			$	$	$	$	$	$	$

	Improvement	Credit Year 4	Balance	Credit Year 5	Balance	Credit Year 6	Balance	Credit Year 7	Balance
1		$	$	$	$	$	$	$	$
2		$	$	$	$	$	$	$	$
3		$	$	$	$	$	$	$	$
4		$	$	$	$	$	$	$	$

Don D. Pretzer
Extension Economist
Farm Management

COOPERATIVE EXTENSION SERVICE, KANSAS STATE UNIVERSITY, MANHATTAN
MF-429 January 1977
Issued in furtherance of Cooperative Extension Work, acts of May 8 and June 30, 1914, as amended. Kansas State University of Agriculture and Applied Science, County Extension Councils, and United States Department of Agriculture Cooperating, John O. Dunbar, Director. All educational programs and materials available to individuals without discrimination on the basis of age, socioeconomic level, race, color, national origin, sex or religion.
1-77--6M
File Code: Farm Management 9-3

FARM BUSINESS ARRANGEMENT

UNIT III

LEASING ARRANGEMENTS

TEST

1. Match:

____a. Leasing

____b. Crop share lease

____c. Livestock share lease

____d. Cash lease

____e. Machinery lease

____f. Custom hiring

____g. Full service lease

____h. Contract

____i. Vertical coordination

____j. Vertical integration

____k. Operating lease

____l. Oral lease

1. Two or more people enter into an agreement with the details spelled out.

2. The tenant and landlord share equally in both livestock and crop production.

3. The landlord is paid a specified cash payment and tenant receives the entire production of crops and livestock.

4. The linking of two or more stages in the chain of production.

5. Short term contract is usually the use of machinery for a few hours or two to three growing seasons. Lessor is responsible for insurance and major repairs.

6. Is an operation lease arrangement whereby the owner of the equipment furnishes the machine operator in addition to covering all operation expenses.

7. Leasing of machinery by an agreed contract.

8. Landlord provides land and shares the fertilizer expenses at the percentage of crop he receives.

9. Verbal agreement between landlord and tenant.

10. Give lessee control over assets owned by lessor for a specific period of time.

11. Where two or more firms are merged into one ownership and management unit.

12. Is an operating lease contract under which the lessor assumes total responsibility for all repairs and maintenance costs.

TEST

2. Name the five advantages of cash rent.

   a.

   b.

   c.

   d.

   e.

3. Name two disadvantages of cash rent.

   a.

   b.

4. Name five advantages of crop share lease.

   a.

   b.

   c.

   d.

   e.

5. Name four disadvantages of crop share lease.

   a.

   b.

   c.

   d.

6. Name five advantages of livestock lease.

   a.

   b.

   c.

   d.

   e.

TEST

7. Name four disadvantages of livestock lease.

a.

b.

c.

d.

8. Name four advantages of written contracts.

a.

b.

c.

d.

9. Name five advantages of a written agreement over an oral agreement.

a.

b.

c.

d.

e.

10. Identify the six items needed in developing and testing for fairness in an irrigation lease.

a.

b.

c.

d.

e.

f.

TEST

11. Identify the nine tests of a good irrigation lease.

    a.

    b.

    c.

    d.

    e.

    f.

    g.

    h.

    i.

FARM BUSINESS ARRANGEMENTS

UNIT III

LEASING ARRANGEMENTS

ANSWERS TO TEST

1. a. 10
   b. 8
   c. 2
   d. 3
   e. 7
   f. 6
   g. 12
   h. 1
   i. 4
   j. 11
   k. 5
   l. 9
2. a. Can make all management decisions
   b. Receives 100 percent of crop
   c. Easier to store grain
   d. Less records to keep
   e. Landlord easier to satisfy
3. a. Needs cash to pay rent at beginning of lease
   b. Lessee has all risks

ANSWERS TO TEST

4. a. Lessee can gain control of more non-equitable capital than he can purchase on his own.

   b. Lessee can operate larger business

   c. Lessor and lessee share part of the risk

   d. Lessor still has opportunity to make management decisions

   e. Allow young farmer chance to get established with less capital

5. a. Lessor may want too large share of crop

   b. Lessor may be too dictatorial

   c. Lessor and lessee may not get along

   d. More records to keep

6. a. Allow young farmers to get started in farming

   b. Lessor can help provide young farmer with management decisions

   c. Allow lessor to continue actively longer in farm business

   d. Lessee can get started into farming with less capital

   e. Allow whole farm to be utilized more efficiently

7. a. Lessor may be too dictatorial

   b. Lessor and lessee may not be compatible

   c. More farm records to keep

   d. Living conditions may not be adequate

8. a. Less chance for misunderstandings

   b. Lessor and lessee know for sure what each is accountable for

   c. Can be made for longer periods of time

   d. Long range plans can be made with more certainty

ANSWERS TO TEST

9. a. People are forgetful unless written down
   b. Can be made for longer periods of time
   c. Lessee can plan for longer period of time
   d. Lessor and lessee know for sure what each is accountable for
   e. Less chance of misunderstanding

10. a. Value of land
    b. Value of irrigation components
    c. Value of crop machinery
    d. Value of management
    e. Cost of variable inputs to production. (To be perfectly equitable under varying yields, all variable costs must be shared in the same ratio as the contribution of each parties fixed costs are to the total costs.)

11. a. Does the lease encourage the most profitable long time operation of this farm?
    b. Does it encourage use of the best amount of capital of different kinds by both parties?
    c. Does the lease encourage a tenant to operate the farm in the same way a well financed owner-operator would run it?
    d. Are returns to landlord and tenant shared in the same proportion as the contributions each makes to the business?
    e. Are the best available farming methods used?
    f. Are soil productivity and useful improvements maintained?
    g. Is there a plan available to obtain new and needed improvements?
    h. Is the lease in writing?
    i. Does the lease clearly state the sharing of income and all expenses and give adequate legal protection to both parties?

CREDIT MANAGEMENT

UNIT I

SOURCES OF CREDIT

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to calculate interest rates. The student should be able to list the types of farm credit and be able to recognize the importance of credit in relation to the farming program. The student should demonstrate the procedures for obtaining a loan. This knowledge will be evidenced through demonstration and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Define and match terms associated with farm finance.
2. Select the type of loans when given the proper definition.
3. Name five important characteristics a lender looks for in a borrower.
4. Name five main sources of farm credit.
5. Name five important characteristics a borrower looks for in a lender.
6. Name the three classes of credit.
7. Recognize and name five factors indicating that borrowing is a good business practice.
8. Recognize and list five causes for poor repayment ability on a loan.
9. Identify credit instruments and develop the ability to use these instruments in his farming programs.
10. Calculate interest when given a problem and a formula.
11. List three factors that determine credit charges.
12. Determine the advantages and disadvantages of credit sources.
13. Select factors in choosing a source of credit.

CREDIT MANAGEMENT

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Secure chart for determining compound interest
7. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheet
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Sample Check & Warehouse Receipt

   TM 2 - Draft

   TM 3 - Promissory Note

   TM 4 - Security Agreement

INSTRUCTIONAL MATERIALS

3. Transparency Masters (cont.)

   TM 5 - Installment Note

   TM 6 - Combination Collateral Note

   TM 7 - Personal Loan Application

   TM 8 - Financial Statement for Stockmen

4. Assignment Sheet

   #1 - Calculating Interest

5. Answers to Assignment Sheet

6. Test

7. Answers to Test

References:

1. Nelson, Aaron G., and William G. Murray. Agriculture Finance, Ames, Iowa: Iowa State University Press, 1967.

2. KSU Extension, Credit-Sources, Costs, Contracts, Pitfalls xc-480, Extension Service, Kansas State University, Manhattan, Kansas.

3. Castle, Emery N., and Manning H. Becker. Farm Business Management, New York: The Macmillan Company, 1967.

4. Financing Modern Agriculture, Farm Credit Banks of Wichita

(NOTE: Financing modern agriculture transparencies are available upon request.)

CREDIT MANAGEMENT

UNIT I

INFORMATION SHEET

I. Terms and Definitions

A. Credit - A desirable and useful farm tool when it will improve the economic and social well-being of the farm family

B. Interest charge - The amount of money charged for the use of money loaned

C. Check - A signed written order on a bank to pay a certain sum of money on demand to the bearer of the check or to the order of a named person

D. Draft - An instrument similar to a check except that the order when paid by the bank is not charged to the signer but to a third person named on the face of the draft

E. Promissory note - An unconditional written promise, signed by the maker, to pay on demand or at a fixed or determinable future time, a certain sum of money to the bearer of the designated payee on his order

F. Mortgage - An instrument creating a lien on property or making a conditional transfer of title to property, and given as security for the payment of a debt or the carrying out of a contract

G. Lien - A legal claim against property, usually proven by a mortgage, a security agreement, a sales contract, or other written contracts

H. Warehouse receipt - A receipt given by a warehouseman for goods received by him for storage in his warehouse

I. Bill of lading - A contract or receipt signed by a common carrier agreeing to deliver the described freight to a given person at a stated place

J. Release - The transfer of a person's interest or right in property to another person or company who has an interest in and usually possession of said interest or property

K. Sales contract - An agreement by one party to sell a property or a service to a second party for a stated price and under stated conditions

INFORMATION SHEET

L. Consumer credit - The services bought that are used up or consumed and do not directly improve the earning capacity or financial condition of the borrower

M. Appraisal - A fair market value given on personal and real property

N. Collateral - Livestock, land and other property used to secure a loan

O. Amortized - Regular schedule of payment of the loan

P. Interest rate - Percentage charged for the use of money borrowed

Q. Maturity - Date the loan is to be paid in full

R. Mortgages - A written claim listing the collateral to secure the loan

S. Principle - Amount of money borrowed

II. Types of Loans

A. Long-term loans

1. Extend for periods over seven years

2. Used for purchase of items such as land and large buildings

B. Intermediate loans

1. Extend for periods one to seven years

2. Used for purchase of machinery and equipment, the purchase of breeding herds and flocks, and construction or major repair of farm buildings

C. Short-term loans

1. Extend for periods up to one year

2. Used for such items as fertilizer, feed or seed, or to pay other current operating expenses

INFORMATION SHEET

III. Characteristics Lender Seeks in Borrower

A. Man

B. Financial position

C. Repayment capacity

D. Purpose of loan

E. Security for loan

IV. Sources of Farm Credit

A. Merchants or dealers of short-term loans

B. Individual short-term and intermediate loans

C. Commercial banks short-terms and intermediate loans

D. Insurance companies long-term loans

E. Federal Land Bank long-term loans

F. Production Credit Association short-term and intermediate loans

G. Farm Home Administration short-term and intermediate loans

(NOTE: Type of loan listed is of primary interest to lending source.)

V. Characteristics Borrower Seeks in Lender

A. Character

B. Lending policies

C. Permanence and dependability

D. Experience and knowledge of farming

E. Cost of the loan

VI. Classes of Credit

A. Financing crop and livestock production

INFORMATION SHEET

B. Financing land

C. Financing farmers' cooperatives

VII. Factors Indicating That Borrowing is a Good Business Practice

A. An additional income

B. An increase in size of operation

C. A product price rise

D. A sufficient repayment capacity

E. An individual's ability as a manager

VIII. Causes of Poor Repayment

A. Business too small

B. Low production per unit due to

1. Poor crop yield
2. Small calf crop
3. Small pig crop
4. Small returns from poultry

C. Low price per unit sold due to

1. Poor market
2. Poor marketing
3. Poor quality

D. High cash production costs due to
1. High feed
2. High labor
3. High replacement

E. High cash overhead due to
1. Heavy debt load
2. High interest rate
3. Heavy taxes
4. High maintenance costs

INFORMATION SHEET

F. High cash living costs due to
    1. Extravagance
    2. Sickness
    3. Education of children

G. Borrowing above ability to repay

H. Overestimating the amount of the loan

IX. Credit Instruments (TM 1 through TM 8)

A. Check

B. Draft

C. Promissory note

D. Warehouse receipt

E. Financing statement

F. Security Agreement

G. Installment note

H. Combination collateral note

I. Personal loan application

J. Financial statement for stockmen

X. Types of Interest

A. Compound interest - Interest calculated at regular intervals and added to the principle (compound interest is the same for savings as borrowing)

Example: Compound interest on a $100.00 loan with interest at 1 percent per month

INFORMATION SHEET

Period	Beginning Balance	Chart Interest	Ending Balance
a. 1st Mo.	$100.00	$1.00	$101.00
b. 2nd Mo.	101.00	1.01	102.01
c. 3rd Mo.	102.01	1.02	103.03
d. 4th Mo.	103.03	1.03	104.06

B. Simple interest - Product of the principle, the time in years, and the annual rate of interest

Example: Interest on $1,200.00 for one year with the rate of interest at 6 percent per annum equals $72.00

C. Discounted interest - Interest is deducted from principle at time loan is made

Example:

a. $1,200.00 loan for one year discounted at 6 percent

b. Borrower would receive: $1,200.00 - $72.00 = $1,128.00

c. $1,200.00 would be paid at the end of the year

(NOTE: True annual interest would be 6.38 percent.)

D. Add-on-interest - Interest is calculated on the beginning balance and then added to principle to obtain the amount to be repaid in equal periodic installments

Example:

a. $1,200.00 installment plan loan @ 6 percent interest to be repaid in 12 equal monthly payments

b. $1,200.00 x 6% = $72.00

c. $1,200.00 + $72.00 = $1,272.00/12 mo. = $106.00 payment

INFORMATION SHEET

(NOTE: Interest is being paid on unowed money, true annual interest rate is 11.07%)

E. Calculating interest rates

$$\frac{\text{Total of finance charge}}{\tfrac{1}{2}\text{ original loan}} \times \frac{\text{No. of payments}}{\text{No. of years}} \times \frac{1}{\text{No. of payments plus 1}} = \text{True annual rate of interest}$$

Example: A farmer borrows $8,000 which costs him $600.00 for twenty-four months. What was his interest rate?

$$\frac{600}{2,000} \times \frac{24}{2} \times \frac{1}{25} = 14.4\%$$

XI. Factors That Determine Credit Charges

A. Cost of money in the money market

B. Service cost of making records, keeping records, and collecting loans

(NOTE: Service charges may be a separate cost.)

C. Risk of loss

XII. Advantages and Disadvantages of Credit Source

A. Commercial banks

1. Advantages

a. Convenience of borrowing

b. Know personal needs

c. Loan approved quickly

d. Loans on more diversified items

INFORMATION SHEET

e. Will make character loans

2. Disadvantages

    a. Interest rate usually higher

    b. Short-term loans

    c. Will not loan as much on land as some agencies

B. Individuals

1. Advantages

    a. Lower rate of interest

    b. Immediate loan

    c. Greater possibility to negotiate the payments and the interest rate

    d. Could be used for land purchases

    e. Seller of land can spread income over a period of time

2. Disadvantages

    a. Not dependable

    b. Usually short-term credit

Financing by Contract

1. Advantages
    a. Both buyer and seller have interest in property
    b. Buyer may be able to handle transaction with less down payment than with commercial lender
    c. Interest rate can be negotiated
    d. Seller can spread income over a period of time

2. Disadvantages
    a. Seller will not receive all of selling price immediately
    b. Price may be inflated
    c. Greater risk
        1) Seller may have to repossess
        2) Buyer may lose equity on repossession

INFORMATION SHEET

C. Finance companies

1. Advantages
    a. Easier for poor risk persons
    b. Immediate loan approval
    c. Short-term loans
    d. Convenience of borrowing
2. Disadvantages
    a. Interest rates extremely high
    b. Usually a straight line interest rate on a longer term
    c. High pressure loan agents

D. Federal land banks

1. Advantages
    a. Usually have low interest rates on long-term loans
    b. Long-term loan (20-40 years)
    c. More understanding on economic conditions
2. Disadvantages
    a. Complicated loan procedure
    b. Borrower has to buy shares
    c. Usually appraised value is low
    d. Limited funds to be loaned

E. Production credit association

1. Advantages
    a. Low interest rate
    b. Unlimited funds

INFORMATION SHEET

c. Pay interest only on amount of time money is used

d. Keeps better records

2. Disadvantages

   a. Borrower has to buy shares

   b. Short-term loans

   c. Not conveniently located

F. Farmers' Home Administration

(NOTE: Check with county supervisor.)

1. Advantages

   a. Makes loans to individuals who do not qualify for other loans

   b. Short, intermediate, and long-term loans

   c. Reasonable rates and terms on loans

   d. Advice, assistance, and supervision given by county supervisor

   e. Special loans to youth available

2. Disadvantages

   a. Not intended as a permanent source of financing

   b. Borrowers expected to refinance when suitable commercial sources are available

   c. Secure loans only on larger acreages

G. Insurance companies

1. Advantages

   a. Long-term mortgages

   b. Low interest rates

   c. Not any upper limits on size of loan except for self-imposed limits

2. Disadvantages

INFORMATION SHEET

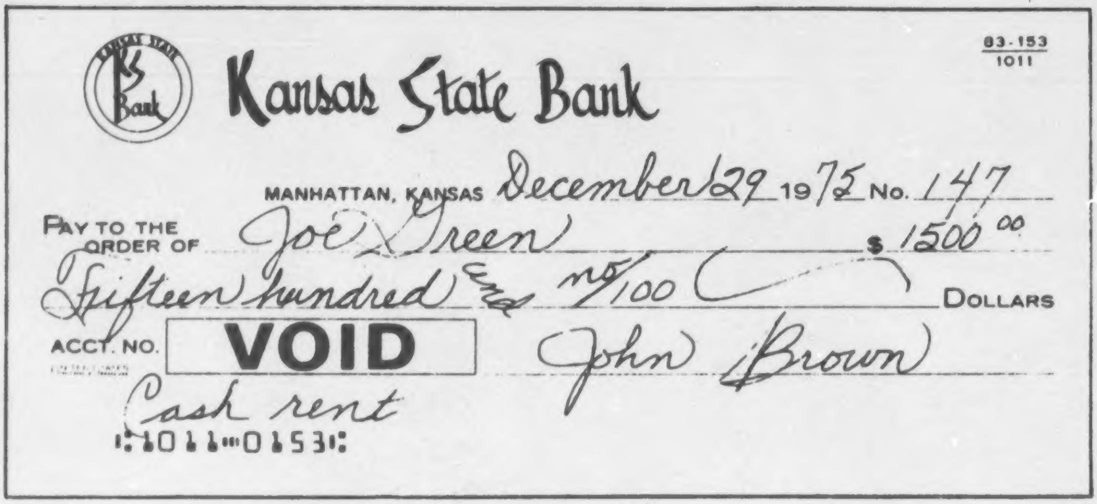
    a. First mortgages
    b. Some states prohibit short-term loans
    c. Selective about areas where loans are made
    d. Can not pay loan back all at once

- H. Merchants and dealers
    - 1. Advantages
        - a. Easier for poor risk persons
        - b. Convenient for farmer
        - c. Immediate loan
        - d. Loan can be made for large percent of value
        - e. Repayment schedule may be designed for individual
    - 2. Disadvantages
        - a. Interest is higher
        - b. May have different form of credit arrangement for various customers (This could be an advantage.)

XIII. Factors to Consider in Choosing a Source of Credit

- A. Amount of the loan
- B. Rate of interest
- C. Length of loan period
- D. Repayment schedules
- E. Size of payments
- F. Reliability of lending agents
- G. Additional credit charges

SAMPLE CHECK



83-153
1011

Kansas State Bank

MANHATTAN, KANSAS December 29 1975 No. 147

PAY TO THE ORDER OF Joe Green $ 1500 00

Fifteen hundred and no/100 DOLLARS

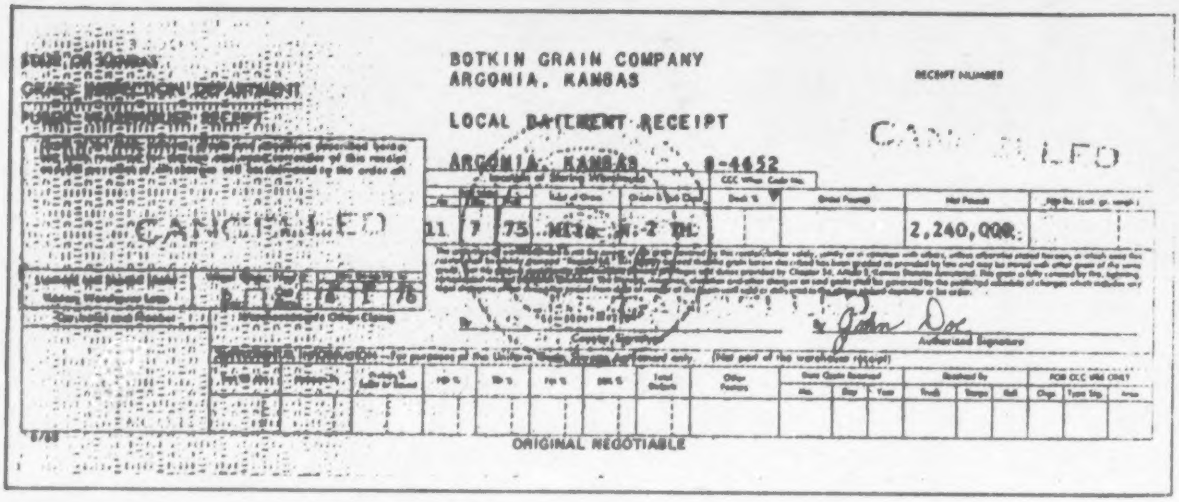
ACCT. NO. **VOID**

John Brown

Cash rent

1011 0153

WAREHOUSE RECEIPT



STATE OF KANSAS
GRAIN INSPECTION DEPARTMENT
PUBLIC WAREHOUSE RECEIPT

CANCELLED

BOTKIN GRAIN COMPANY
ARGONIA, KANSAS

RECEIPT NUMBER

LOCAL BAILMENT RECEIPT

CANCELLED

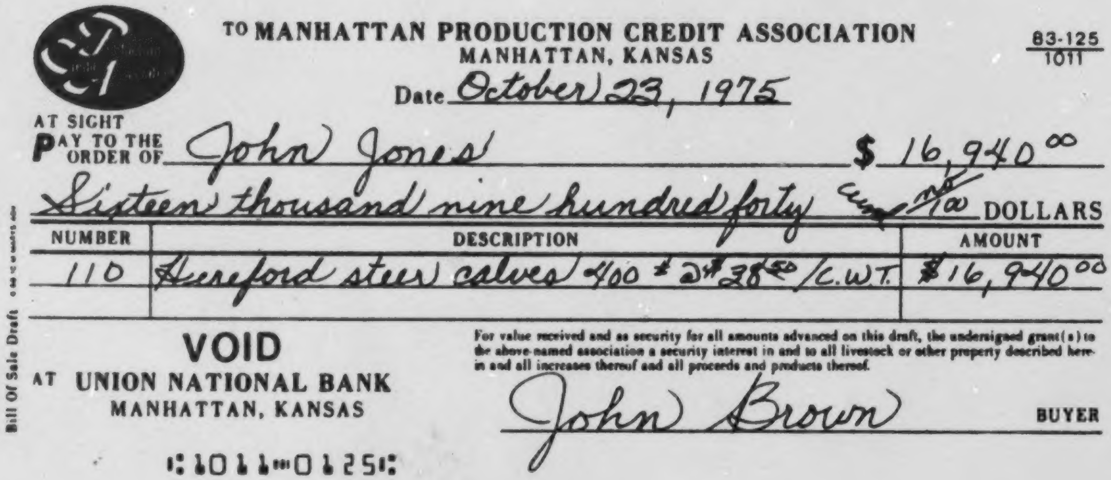
ARGONIA, KANSAS 0-4452
Location of Storing Warehouse
CCC Whse. Code No.

			Kind of Grain	Grade	Dock %	Gross Pounds	Net Pounds	
11	7	75	MILO	No. 2 YL			2,240,000	

John Doe
Authorized Signature

ORIGINAL NEGOTIABLE

A BILL OF SALE SIGHT DRAFT



TO **MANHATTAN PRODUCTION CREDIT ASSOCIATION**
MANHATTAN, KANSAS

83-125
1011

Date October 23, 1975

AT SIGHT PAY TO THE ORDER OF John Jones $ 16,940^{00}

Sixteen thousand nine hundred forty no/100 DOLLARS

NUMBER	DESCRIPTION	AMOUNT
110	Hereford steer calves 400 # @ 38^{00} /C.W.T.	$16,940^{00}

VOID

AT **UNION NATIONAL BANK**
MANHATTAN, KANSAS

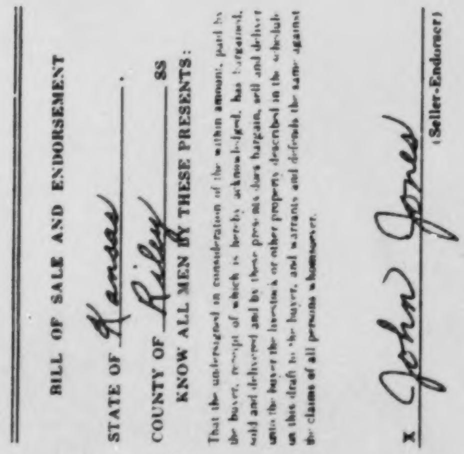
⑆1011⑈0125⑆

For value received and as security for all amounts advanced on this draft, the undersigned grant(s) to the above-named association a security interest in and to all livestock or other property described herein and all increases thereof and all proceeds and products thereof.

John Brown BUYER

Bill Of Sale Draft

A BILL OF SALE SIGHT DRAFT
(Back)



BILL OF SALE AND ENDORSEMENT

STATE OF Kansas.

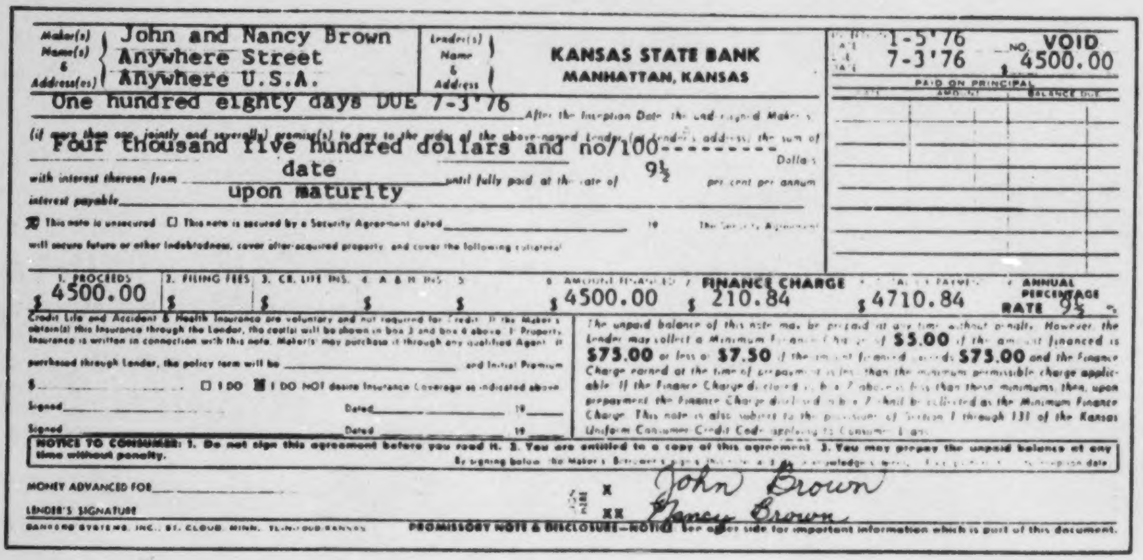
COUNTY OF Riley SS

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned in consideration of the within amount, paid by the buyer, receipt of which is hereby acknowledged, has bargained, sold and delivered and by these presents does bargain, sell and deliver unto the buyer the livestock or other property described in the schedule on this draft to the buyer, and warrants and defends the same against the claims of all persons whomsoever.

x John Jones
(Seller-Endorser)

PROMISSORY NOTE



Maker(s) Name(s) & Address(es): John and Nancy Brown
Anywhere Street
Anywhere U.S.A.

Lender(s) Name & Address: **KANSAS STATE BANK**
MANHATTAN, KANSAS

[illegible] 1-5'76
[illegible] 7-3'76

NO. VOID
$ 4500.00

PAID ON PRINCIPAL

DATE	AMOUNT	BALANCE DUE

One hundred eighty days DUE 7-3'76 After the Inception Date the undersigned Maker(s) (if more than one, jointly and severally) promise(s) to pay to the order of the above-named Lender (at Lender's address) the sum of Four thousand five hundred dollars and no/100---------- Dollars with interest thereon from date until fully paid at the rate of 9½ per cent per annum interest payable upon maturity

☒ This note is unsecured ☐ This note is secured by a Security Agreement dated ____________ 19 ____ The Security Agreement will secure future or other indebtedness, cover after-acquired property and cover the following collateral

1. PROCEEDS	2. FILING FEES	3. CR. LIFE INS.	4. A & H INS.	5.	6. AMOUNT FINANCED	7. **FINANCE CHARGE**	8. TOTAL OF PAYMENTS	9. **ANNUAL PERCENTAGE RATE**
$ 4500.00	$	$	$	$	$ 4500.00	$ 210.84	$ 4710.84	9½ %

Credit Life and Accident & Health Insurance are voluntary and not required for Credit. If the Maker(s) obtain(s) this Insurance through the Lender, the cost(s) will be shown in box 3 and box 4 above. If Property Insurance is written in connection with this note, Maker(s) may purchase it through any qualified Agent. If purchased through Lender, the policy term will be ____________ and Initial Premium $____________ ☐ I DO ☒ I DO NOT desire Insurance Coverage as indicated above.

Signed____________ Dated____________ 19____

Signed____________ Dated____________ 19____

The unpaid balance of this note may be prepaid at any time without penalty. However the Lender may collect a Minimum Finance Charge of **$5.00** *if the amount financed is* **$75.00** *or less or* **$7.50** *if the amount financed exceeds* **$75.00** *and the Finance Charge earned at the time of prepayment is less than the minimum permissible charge applicable. If the Finance Charge disclosed in box 7 above is less than these minimums, then, upon prepayment the Finance Charge disclosed in box 7 shall be collected as the Minimum Finance Charge. This note is also subject to the provisions of Section 1 through 131 of the Kansas Uniform Consumer Credit Code applying to Consumer Loans.*

NOTICE TO CONSUMER: 1. Do not sign this agreement before you read it. 2. You are entitled to a copy of this agreement. 3. You may prepay the unpaid balance at any time without penalty.

By signing below the Maker(s) [illegible] inception date

MONEY ADVANCED FOR____________

X John Brown

LENDER'S SIGNATURE

XX Nancy Brown

BANKERS SYSTEMS, INC., ST. CLOUD, MINN. [illegible] **PROMISSORY NOTE & DISCLOSURE—NOTICE: See other side for important information which is part of this document.**

SC U1-18

FORM KBA - UCCC - SA 1 - 1/74

Printed By J. M. Hart Co., Inc.
210 West 6th - Topeka, Kansas

SECURITY AGREEMENT

.... Emporia ...., Kansas ...., 19......

TO: ....Emporia State Bank & Trust Co.....................................

The undersigned and each of the undersigned grant to The Emporia State Bank & Trust Co., 8th & Merchant, Emporia, Ks. 66801 ("Bank") a security interest in the following property and any and all increases, additions, accessions, substitutions and proceeds thereto and therefor (herein called "Collateral"):

together with all rights relating thereto. Should the Bank deem any Collateral inadequate or unsatisfactory, or should the value of the Collateral decline the Bank shall have the right to call for additional Collateral to its satisfaction.

The security interest granted to the Bank hereunder shall secure all obligations of the undersigned to the Bank, howsoever created, evidenced or arising, whether direct or indirect, absolute or contingent, or now or hereafter existing, or due or to become due ("Obligations").

If any notification of intended disposition by the Bank of any of the Collateral is required by law, such notification, if mailed, shall be deemed reasonably and properly given if mailed at least ten (10) days before such disposition, postage prepaid, addressed to the undersigned either at the address shown below, or at any other address of the undersigned appearing on the records of the Bank. The rights, duties and obligations hereunder of the Bank and the undersigned shall, unless otherwise required by law, be governed by the provisions of the Uniform Commercial Code as in effect from time to time in the State of Kansas and other laws of the State of Kansas, or the laws in the State where filed.

If more than one party shall sign this Agreement, the term "undersigned" shall mean and include all parties signing this Agreement and each of them, jointly and severally.

The Debtor agrees that he has read this agreement and that this agreement includes and is subject to the additional provisions set forth below and on the reverse side hereof, such additional provisions, without limitation because of enumeration, being incorporated herein by reference.

If the Collateral is to be attached to real estate, a legal description of the real estate is as follows:

and the name of the record owner is ______________________________ and if the Collateral is attached to real estate prior to the perfection of the security interest granted hereby, the Debtor will on demand of the Secured Party furnish the latter with a disclaimer or disclaimers, signed by all persons having an interest in the real estate, or any interest in the Collateral which is prior to the Secured Party's interest.

This security agreement continues on the reverse side.

NOTICE TO CONSUMER: 1. Do not sign this agreement before you read it. 2. You are entitled to a copy of this agreement. 3. You may prepay the unpaid balance at any time without penalty.

EMPORIA STATE BANK & TRUST CO.
SECURED PARTY

By ______________________________

____
DEBTOR(S)

(over)

TM 4

This FINANCING STATEMENT is presented to a filing officer for filing pursuant to the Uniform Commercial Code

3. Maturity date (if any):

1. Debtor(s) (Last Name First) and address(es)

2. Secured Party(ies) and address(es)

EMPORIA STATE BANK
EMPORIA, KANSAS 66801

For Filing Officer (Date, Time, Number and Filing Office)

4. This financing statement covers the following types (or items) of property:

All equipment, all farm products including but not limited to crops, livestock, supplies used or produced in farming, feeding or ranching operations; all contract rights and accounts; now owned or hereafter acquired.

Assignee of Secured Party

Check (X) if covered: ☐ Proceeds of Collateral are also covered ☐ Products of Collateral are also covered Number of Additional Sheets, if any______

Filed with:

EMPORIA STATE BANK

By: ____________________
Signature(s) of Debtor(s)

By ____________________
Signature(s) of Secured Party (ies)

(1) Filing Officer Copy - Alphabetical

FORM KBA-UCC-1 – KANSAS UNIFORM COMMERCIAL CODE

Form Approved by Paul R. Shanahan
Paul R. Shanahan, Secretary of State

FORM 1004 KANSAS—REV. 1-74 UNITED STATES

INSTALLMENT NOTE

$__________ Name ____________________ ____________, 19____

FOR VALUE RECEIVED the undersigned jointly and severally promise to pay to the order of:

EMPORIA STATE BANK & TRUST COMPANY, 8TH & MERCHANT, EMPORIA, KANSAS 66801

____________________ at its offices the sum

of ____________________ DOLLARS

in ________ installments of $________ each, then installments of $________ each, the first installment due ________,

19____, the remaining installments to become due and payable as follows: ____________________

Default in the payment of any installment due hereafter may at the option of the holder, render the unpaid balance immediately due and payable, subject to borrower's right to cure under the Kansas Uniform Consumer Credit Code.

If any installment is not paid in full within 10 days after its scheduled due date, creditor shall be entitled to a delinquency charge in an amount, not more than **$2.50,** equal to **5%** of the unpaid amount of the installment, or an amount equal to the deferral charge that would be permitted to defer the unpaid amount of the installment for the period that it is delinquent, whichever is greater. If an installment is not paid within 10 days after its due date, the creditor may unilaterally grant a deferral of the unpaid amount of the installment and make and collect a charge not exceeding an amount equal to the **ANNUAL PERCENTAGE RATE** stated herein applied to the amount or amounts deferred for the period of deferral.

This loan is subject to the provisions of sections 1 through 131 of the Kansas Uniform Consumer Credit Code applying to consumer loans.

This note may be paid in full at any time before maturity without penalty. Upon such prepayment, the unearned portion of the **FINANCE CHARGE** of **$1.00** or more will be rebated, computed by the rule of 78's. However, creditor may collect or retain a minimum **FINANCE CHARGE** of **$5** if the amount financed is **$75** or less, or **$7.50** if the amount financed exceeds **$75,** and the **FINANCE CHARGE** earned at the time of prepayment is less than such minimum **FINANCE CHARGE.** If the **FINANCE CHARGE** contracted for is less than such minimums, upon such prepayment the **FINANCE CHARGE** contracted for may be retained or collected by creditor as the minimum **FINANCE CHARGE.** This loan is secured by a Security Agreement dated ____________ covering the following property:

This loan calls for the following balloon payments:

Balloon payments (other than those in a loan primarily for an agricultural purpose and those due to the seasonal or irregular income of borrower), which are more than twice as large as the average of earlier scheduled payments or more than twice the amount of an otherwise regularly scheduled equal payment, may be refinanced without penalty if not paid when due and upon terms no less favorable to borrower than the terms of the original transaction. Other balloon payments may be refinanced if not paid when due only upon such terms as the parties to this note may agree upon.

PROCEEDS			AMOUNT FINANCED	**FINANCE CHARGE**	TOTAL OF PAYMENTS	ANNUAL PERCENTAGE RATE
$	$	$	$	$		%

NOTICE TO CONSUMER:

1. **DO NOT SIGN THIS AGREEMENT BEFORE YOU READ IT.**
2. **YOU ARE ENTITLED TO A COPY OF THIS AGREEMENT.**
3. **YOU MAY PREPAY THE UNPAID BALANCE AT ANY TIME WITHOUT PENALTY.**
4. **BY SIGNING BELOW, YOU ALSO ACKNOWLEDGE RECEIPT OF A COPY OF THIS NOTE ON THE DATE HEREOF.**

INSURANCE

PROPERTY INSURANCE, if written in connection with this loan, may be obtained by borrower through any person of his choice. If borrower desires property insurance to be obtained through the creditor, the cost will be $________ for the term of the credit.

CREDIT LIFE AND DISABILITY INSURANCE is not required to obtain this loan. No charge is made for credit insurance and no credit insurance is provided unless the borrower signs the appropriate statement below:

(a) The cost for Credit Life Insurance alone will be $________ for the term of th credit.

(b) The cost for Credit Life and Disability Insurance will be $________ for th term of the credit.

I desire Credit Life Insurance only.		I desire Credit Life and Disability Insurance.		I DO NOT want Credit Life or Disability Insurance.	
(Date)	(Signature)	(Date)	(Signature)	(Date)	(Signature)
(Date)	(Signature)	(Date)	(Signature)	(Date)	(Signature)

TM 5

FORM 1002 KANSAS—REV. 1-74 [illegible]

COMBINATION COLLATERAL NOTE

SC U1-20

________________ Name ________________ Due ________ ________

________________, 19____ ________________ after date the undersigned (jointly and severally if more than one) promises to pay to the order of EMPORIA STATE BANK & TRUST COMPANY, 8TH & MERCHANT, EMPORIA, KANSAS 66801 at its offices, the sum of ________________ Dollars with interest at the rate of ______% per annum payable ________________ at said bank. ______% interest after maturity OR in ________ installments of $________ each, then ________ installments of $________ each, the first installment due ________________, 19____, the remaining installments to become due and payable as follows: ________________

____

having deposited with said bank, as collateral for payment of this and any and all other liabilities, direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising (all hereinafter called "Obligations") of the undersigned to said Bank, its successors or assigns, the following property viz:

____

____

This loan calls for the following balloon payments:

Balloon payments (other than those in a loan primarily for an agricultural purpose and those due to the seasonal or irregular income of borrower), which are more than twice as large as the average of earlier scheduled payments or more than twice the amount of an otherwise regularly scheduled equal payment, may be refinanced without penalty if not paid when due and upon terms no less favorable to borrower than the terms of the original transaction. Other balloon payments may be refinanced if not paid when due only upon such terms as the parties to this note may agree upon.

The undersigned agrees to deliver to the holder additional collateral should the holder deem itself insecure.

At the option of the holder, all Obligations shall become immediately due and payable without notice or demand upon the occurrence of any of the following events of default: (a) failure of the undersigned with or without demand or notice, to deliver additional security as above agreed; (b) default in the payment of performance of any liability or obligation of any of the undersigned, or of any maker, endorser or guarantor of any liability or obligation of any of the undersigned, to the holder, subject to borrower's right to cure under the Uniform Consumer Credit Code; (c) failure to pay when due any premium on any life insurance policy held as collateral herefor; (d) death, dissolution termination of existence, insolvency, business failure, appointment of a receiver of any part of the property of, assignment for the benefit of creditors by, or the commencement of any proceedings under any bankruptcy or insolvency laws by or against, any maker, endorser, or guarantor hereof or for any other reason the Bank may deem the prospect of payment, performance, or realization of collateral is significantly impaired.

If any installment is not paid in full within 10 days after its scheduled due date, the bank shall be entitled to a delinquency charge in an amount, not more than **$2.50**, equal to **5%** of the unpaid amount of the installment or an amount equal to the deferral charge that would be permitted to defer the unpaid amount of the installment for the period that it is delinquent, whichever is greater. If an installment is not paid within 10 days after its due date, the bank may unilaterally grant a deferral of the unpaid amount of the installment and make and collect a charge not exceeding an amount equal to the **ANNUAL PERCENTAGE RATE** stated herein applied to the amount or amounts deferred for the period of deferral.

Also, in such event of default, the Bank shall have full power and authority at any time or times thereafter to exercise all or any one or more of the remedies and shall have all the rights of a secured party under the Uniform Commercial Code of Kansas or other applicable law. Unless the collateral is perishable or threatens to decline speedily in value or is of a type customarily sold on a recognized market, the holder will give the undersigned reasonable notice of the time and place of any public sale thereof or of the time after which any private sale or other intended disposition is to be made. The requirement of reasonable notice shall be met if such notice is mailed, postage prepaid, to the undersigned at the address given below at least five (or whatever figure is deemed reasonable) days before the time of the sale or disposition.

Right is expressly granted to the holder at its option to transfer at any time to itself or to its nominee any securities pledged hereunder and to receive the income thereon and hold the same as security hereof, or apply it on the principal or interest due hereon or due on any liability secured hereby.

Any deposits or other sums at any time credited by or due from the holder to any maker, endorser or guarantor hereof and any securities or other property of any maker, endorser or guarantor hereof in the possession of the holder may at all times be held and treated as collateral security for the payment of the Obligations. The holder may apply or set off such deposits or other sums against said liabilities at any time in the case of makers, but only with respect to matured liabilities in the case of endorsers or guarantors.

The holder may at its option, whether or not this note is due, demand, sue for, or make any compromise or settlement it deems desirable with reference to collateral held hereunder. The holder shall not be bound to take any steps necessary to preserve any rights in the collateral against prior parties, which the undersigned hereby assumes to do.

No delay or omission on the part of the holder in exercising any right hereunder shall operate as a waiver of such right or of any other right under this note. A waiver on any one occasion shall not be construed as a bar to or waiver of any such right and/or remedy on any future occasion.

This note may be paid in full at any time before maturity without penalty. Upon such prepayment, the unearned portion of the **FINANCE CHARGE** of **$1.00** or more will be rebated, computed by the rule of 78's. However, creditor may collect or retain a minimum **FINANCE CHARGE** of **$5** if the amount financed is **$75** or less, or **$7.50** if the amount financed exceeds **$75**, and the **FINANCE CHARGE** earned at the time of prepayment is less than such minimum **FINANCE CHARGE.** If the **FINANCE CHARGE** contracted for is less than such minimums, upon such prepayment the **FINANCE CHARGE** contracted for may be retained or collected by creditor as the minimum **FINANCE CHARGE.**

PROCEEDS			AMOUNT FINANCED	**FINANCE CHARGE**	TOTAL OF PAYMENTS	**ANNUAL PERCENTAGE RATE**
$	$	$	$	$		%

NOTICE TO CONSUMER:

1. **DO NOT SIGN THIS AGREEMENT BEFORE YOU READ IT.**
2. **YOU ARE ENTITLED TO A COPY OF THIS AGREEMENT.**
3. **YOU MAY PREPAY THE UNPAID BALANCE AT ANY TIME WITHOUT PENALTY.**
4. **BY SIGNING BELOW, YOU ALSO ACKNOWLEDGE RECEIPT OF A COPY OF THIS NOTE ON THE DATE HEREOF.**

INSURANCE

PROPERTY INSURANCE, if written in connection with this loan, may be obtained by borrower through any person of his choice. If borrower desires property insurance to be obtained through the creditor, the cost will be $________ for the term of the credit.

CREDIT LIFE AND DISABILITY INSURANCE is not required to obtain this loan. No charge is made for credit insurance and no credit insurance is provided unless the borrower signs the appropriate statement below:

- (a) The cost for Credit Life Insurance alone will be $________ for the term of the credit.
- (b) The cost for Credit Life and Disability Insurance will be $________ for the term of the credit.

I desire Credit Life Insurance only.		I desire Credit Life and Disability Insurance.		I DO NOT want Credit Life or Disability Insurance	
(Date)	(Signature)	(Date)	(Signature)	(Date)	(Signature)
(Date)	(Signature)	(Date)	(Signature)	(Date)	(Signature)

Every maker, endorser and guarantor of this note, or the obligation represented hereby, waives presentment, demand, notice, protest, and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this note, assents to any extension or postponement of the time of payment or any other indulgence, to any substitution, exchange or release of collateral, and/or to the addition or release of any other party or person primarily or secondarily liable. The reasonable expenses of holding, preparing for sale, selling or the like of the collateral shall be paid from the proceeds of the collateral.

As herein used the word "holder" shall mean the payee or other endorsee of this note, who is in possession of it, or the bearer hereof, if this note is at the time payable to the bearer. This loan is subject to the provisions of sections 1 through 131 of the Kansas Uniform Consumer Credit Code applying to consumer loans.

Address ________________ Signed ________________

________________ ________________

SC U1-21

PERSONAL LOAN APPLICATION

PERSONAL

NAME *(Please Print Full Name)*			STREET ADDRESS		
CITY & STATE	ZIP	HOW LONG	HOME PHONE NO	BUSINESS PHONE NO	SOCIAL SECURITY NO
PREVIOUS ADDRESS			HOW LONG AT PREV ADD	HOW LONG IN CITY	DRAFT STATUS
AGE	MARITAL STATUS	NO. OF CHILDREN	SPOUSE'S NAME		SPOUSE'S AGE

NAMES & ADDRESSES OF TWO NEAREST RELATIVES NOT LIVING WITH YOU — RELATIONSHIP

(1)

(2)

NAME OF YOUR BANK

BANK SERVICES PRESENTLY USED ☐ Checking Acct. No. ☐ Savings Acct. No. ☐ Loan ☐ Cert. of Deposit ☐ Safe Deposit Box

PRINCIPAL ASSETS

AUTO *(Year, Make, & Model)*		ESTIMATED VALUE $	SAVINGS & LOAN COMPANY	ESTIMATED VALUE $
AUTO *(Year, Make, & Model)*			STOCKS & BONDS	
LIFE INSURANCE COMPANY	FACE VALUE	CASH VALUE	OTHER ASSETS *(Describe)*	

MY AUTO INSURANCE AGENT'S NAME & ADDRESS IS: — AUTO POLICY NO

EMPLOYMENT & INCOME

MY EMPLOYER IS: *(Name & Address)*	HOW LONG	POSITION OR TITLE	MONTHLY INCOME $
MY SPOUSE'S EMPLOYER IS: *(Name & Address)*	HOW LONG	POSITION OR TITLE	
WE HAVE OTHER INCOME FROM: *(Source)*			
MY PREVIOUS EMPLOYER WAS: *(Name & Address)*	NO. OF YEARS	**OUR TOTAL MONTHLY INCOME IS $**	

CURRENT DEBTS & CREDIT REFERENCES

(Please list below all Mortgage Companies, Banks, Finance Companies, Credit Unions, Merchants, & Individuals you now owe.)

TO WHOM OWED	PURPOSE	ORIGINAL BALANCE	PRESENT BALANCE	MONTHLY PAYMENT
☐ House Payment ☐ Rent		$	$	$
Bank Americard - Card No.				
Master Charge - Card No.				

HAVE YOU EVER APPLIED WITH US FOR A LOAN? ☐ Yes - When? ☐ No

HAVE YOU EVER BEEN BANKRUPT, OR HAD ANY JUDGMENTS OR GARNISHMENTS AGAINST YOU? ☐ Yes - When? ☐ No

OUR TOTAL MONTHLY PAYMENTS ARE $

I/We wish to borrow $ for months for the purpose of:

I/We offer the following as security:

NOTICE The Bank may cause a credit investigation to be made concerning your character, general reputation, personal characteristics, and mode of living among your friends, neighbors, associates, consumer reporting agencies, and other sources to be considered as a part of this Application.

I/We certify that the above information is accurate and complete and is given for the purpose of obtaining credit.

SIGNATURE X DATE SIGNATURE X DATE

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TM 7

Form

SC U1-22

FINANCIAL STATEMENT FOR STOCKMAN OR FARMER

NAME ______________________ ADDRESS ______________________

TO ______________________

The following statement and information are furnished by the undersigned for the purpose of obtaining credit from your bank from time to time. The statement represents my true financial condition on ______________, 19___. You may consider this statement as continuing to be true and correct until written notice of any change is given to you by the undersigned..

(FILL IN ALL BLANKS. INDICATE "NO" OR "NONE" WHERE NECESSARY.)

ASSETS	AMOUNT
CURRENT ASSETS	
CASH ON HAND AND IN BANKS (INCLUDING CHECKING AND SAVINGS ACCOUNTS AND CERTIFICATES OF DEPOSIT)	$
GOVERNMENT BONDS AND SECURITIES	
CASH VALUE OF LIFE INSURANCE $ ________ LESS BORROWING $ ________	
OTHER INVESTMENTS (SCHEDULE 1)	
FARM PRODUCTS, GRAIN AND FEED ON HAND (SCHEDULE 2)	
LIVESTOCK (SCHEDULE 3)	
ALL OTHER CURRENT ASSETS (ITEMIZE)	
TOTAL CURRENT ASSETS	$
FIXED ASSETS	
FARM MACHINERY AND AUTOMOTIVE EQUIPMENT (SCHEDULE 4)	
FARM AND RANCH LANDS LESS EXEMPTION $ ________ (SCHEDULE 5)	
OTHER REAL ESTATE (SCHEDULE 6)	
OTHER FIXED ASSETS (ITEMIZE)	
TOTAL FIXED ASSETS	$
TOTAL ASSETS	$

LIABILITIES AND NET WORTH	AMOUNT
CURRENT LIABILITIES (DUE IN 12 MONTHS)	
UNSECURED NOTES PAYABLE TO BANKS (SCHEDULE 7)	$
LOANS SECURED BY LIVESTOCK (SCHEDULE 8)	
LOANS ON FARM MACHINERY AND AUTOMOTIVE EQUIPMENT (SCHEDULE 9)	
OTHER LOANS (SCHEDULE 10)	
ACCOUNTS PAYABLE (HARDWARE, FEED, VET, REPAIRS, ETC.)	
INTEREST DUE AND PAYABLE	
PAYROLL TAXES	
REAL ESTATE TAXES DUE AND PAYABLE	
INCOME TAXES DUE AND PAYABLE (FEDERAL AND STATE)	
INCOME TAXES ESTIMATED FOR CURRENT YEAR (FEDERAL AND STATE)	
ALL OTHER CURRENT DEBTS (ITEMIZE)	
TOTAL CURRENT LIABILITIES	$
LONG TERM LIABILITIES	
LIENS ON FARM AND RANCH LAND (SCHEDULE 11)	
LIENS ON OTHER REAL ESTATE (SCHEDULE 12)	
ALL OTHER LONG TERM DEBTS (ITEMIZE)	
TOTAL LONG TERM LIABILITIES	$
TOTAL LIABILITIES	$
NET WORTH	
TOTAL LIABILITIES AND NET WORTH	$

SCHEDULE 1 – OTHER INVESTMENTS
(INCLUDES STOCKS AND BONDS)

NAME OF ISSUER	TYPE OF INVESTMENT	MATURITY	PURCHASE PRICE	CURRENT VALUE
			$	$
TOTALS			$	$

SCHEDULE 2 – FARM PRODUCTS, FEED, AND GRAIN ON HAND

CROP	QUANTITY (BU, BALE, CWT)	WHERE STORED	PRICE PER UNIT	TOTAL VALUE
				$
TOTAL				$

SCHEDULE 7 – UNSECURED NOTES PAYABLE TO BANKS

NAME OF BANK	PURPOSE OF LOAN	ORIGINAL AMOUNT	AMOUNT OWED	WHEN DUE	REPAYMENT PLAN
		$	$		
TOTAL			$		

SCHEDULE 8 – LOANS SECURED BY LIVESTOCK

LENDER	SECURITY		AMOUNT OWED	WHEN DUE	REPAYMENT PLAN
	TYPE	NO. OF HEAD			
			$		
TOTAL			$		

SCHEDULE 9 – LOANS ON FARM MACHINERY AND AUTOMOTIVE EQUIPMENT

LENDER	DESCRIPTION	AMOUNT OWED	WHEN DUE	REPAYMENT PLAN
		$		
TOTAL		$		

SCHEDULE 10 – OTHER LOANS (NON-REAL ESTATE)

NAME OF LENDER	PURPOSE OF LOAN	ORIGINAL AMOUNT	AMOUNT OWED	WHEN DUE	REPAYMENT PLAN
		$	$		
TOTAL			$		

SCHEDULE 11 – LIENS ON FARM AND RANCH LANDS

LENDER	ACREAGE AND LOCATION	ORIGINAL AMOUNT	AMOUNT OWED	REPAYMENT PLAN
		$	$	
TOTAL			$	

SCHEDULE 12 – LIENS ON OTHER REAL ESTATE

LENDER	DESCRIPTION AND LOCATION	ORIGINAL AMOUNT	AMOUNT OWED	REPAYMENT PLAN
		$	$	
TOTAL			$	

CREDIT MANAGEMENT

UNIT I

ASSIGNMENT SHEET #1: Calculating Interest

Answer the following problems:

1. How much interest would be paid for the use of $360.00 for one year at 8% straight interest?

2. How much interest would be paid for the use of $360.00 for 18 months at 8% straight interest?

3. How much compound interest would be paid for three month's use of $360.00 at 1% interest per month?

4. a. What would monthly payments be for one year's use of $360.00 to be repaid in 12 equal monthly payments using 8% add-on type interest?

   b. What would be the true annual interest rate for the above loan?

NOTE:

$$\frac{\text{Total of Finance Charges}}{\tfrac{1}{2}\text{ Original Loan}} \times \frac{\text{No. of Payments}}{\text{No. of Years}} \times \frac{1}{\text{No. of Payments Plus 1}} = \text{True Annual Rate of Interest}$$

ASSIGNMENT SHEET #1

5. a. How much interest would be paid for one year's use of $360.00 to be repaid in 12 equal payments using 8% discount interest?

   b. What would be the true annual interest rate for the above loan?

   (NOTE: Use formula as stated in question four.)

6. If a person borrows $2,000.00 for a car, pays $68.89 per month for 36 months. How much interest has he paid?

   What is the true annual interest rate for the above loan?

   (NOTE: Use formula as stated in question four.)

CREDIT MANAGEMENT

UNIT I

ANSWERS TO ASSIGNMENT SHEET #1

1. \$360.00 x 8% = \$28.80

2. \$28.80 for 12 mo. + \$14.40 for 6 mo. = \$43.20

3. 1st mo. \$360 x 1% = 3.60 Ending Balance = \$363.60
   2nd mo. \$363.60 x 1% = 3.64 Ending Balance = \$367.24
   3rd mo. \$367.24 x 1% = 3.67 Ending Balance = \$370.91
   \$10.91 interest

4. a. \$360.00 x 8% = \$28.80

   \$360.00 + \$28.80 = \$388.80

   $\frac{\$388.80}{12} = \$32.23$

   b. $\frac{\$28.80}{180} \times \frac{12}{1} \times \frac{1}{13} =$ 14.7% true annual interest

5. a. \$360.00 x 8% = \$28.80

   b. $\frac{\$28.80}{165.60} \times \frac{12}{1} \times \frac{1}{13} =$ 16.05% true annaul interest

   (NOTE: Since loan was discounted only \$331.20 was amount of original loan.)

6. a. \$68.80 x 36 = \$2,480.04 - \$2,000.00 = \$480.04

   b. $\frac{\$480.04}{1,000} \times \frac{36}{3} \times \frac{1}{37} = 15.5\%$

CREDIT MANAGEMENT

UNIT I

TEST

1. Match the terms on the right to the correct definition.

_____a. Amount of money borrowed

_____b. A fair market value given on personal property

_____c. Livestock, land, and other personal property used to secure the loan

_____d. A written claim listing the collateral to secure the loan

_____e. Date the loan is to be paid in full

_____f. Percentage charged for the use of money borrowed

_____g. Regular schedule of payment of the loan

1. Collateral
2. Appraisal
3. Amortized
4. Interest rate
5. Maturity
6. Mortgages
7. Principle

2. Select the type of loan on the right when given the definitions on the left.

_____a.
   1) Extend for periods of one to five years
   2) Used for purchase of machinery and equipment, the purchase of breeding herds and flocks, and construction or major repair of farm buildings

_____b.
   1) Extend from five to thirty years or more

1. Long-term loans
2. Intermediate loans
3. Short-term loans

TEST

2) Used for such purposes as the purchase of farms, for farm improvements, for major repairs and other purposes

_____c.

1) Extend for periods up to one year

2) Used for such items as fertilizer, feed, seed or to pay other current operating costs

3. What are five important characteristics a lender looks for in a borrower?

4. List five main sources of farm credit.

5. Name five important characteristics a borrower looks for in a lender.

6. What are three classes of credit?

7. Name five factors indicating that borrowing is a good business practice.

8. Name five causes for poor repayment ability on a loan.

TEST

9. List eight credit instruments.

10. List three factors that determine the rate of interest.

    a. 1)

       2)

       3)

    b. A farmer borrowed $6,000 which cost him $400.00 for 24 months. Calculate the interest by using the following formula.

$$\frac{\text{Total of Finance Charges}}{\tfrac{1}{2}\text{ Original Loan}} \times \frac{\text{No. of Payments}}{\text{No. of Years}} \times \frac{1}{\text{No. of Payments Plus 1}} = \text{True Annual Rate of Interest}$$

11. List three three factors that determine credit charges.

12. Match the source of credit on the right with the proper list of advantages and disadvantages on the left.

_____a.

1) Advantages

   a) Easier for poor risk persons
   b) Convenient for farmer
   c) Immediate loan
   d) Loan can be made for large percent of value
   e) Repayment schedule may be designed for individual

1. Commercial banks
2. Farmers' home administration
3. Federal land banks
4. Insurance companies
5. Production credit association
6. Merchants and dealers
7. Individuals
8. Finance companies

TEST

2) Disadvantages

   a) Interest is higher

   b) May have different form of credit arrangement for various customers (This could be an advantage)

_____b.

1) Advantages

   a) Makes loans to individuals who do not qualify for other loans

   b) Short, intermediate, and long-term loans

   c) Reasonable rates and terms on loans

   d) Advice, assistance, and supervision given by supervisor

2) Disadvantages

   a) Not intended as a permanent source of financing

   b) Borrowers expected to refinance when suitable commercial sources are available

   c) Secure loans only on larger acreages

_____c.

1) Advantages

   a) Usually have low interest rates on long-term loans

   b) Long-term loan (20-40 years)

TEST

  c) More understanding on economic conditions

2) Disadvantages
  a) Complicated loan procedure
  b) Borrower has to buy shares
  c) Usually appraised value is low
  d) Limited funds to be loaned

_____ d.

1) Advantages
  a) Convenience of borrowing
  b) Know personal needs
  c) Loan approved quickly
  d) Loans on more diversified items
  e) Will make character loans

2) Disadvantages
  a) Interest rate usually higher
  b) Short-term loans
  c) Will not loan as much on land as some agencies

_____ e.

1) Advantages
  a) Low rate of interest
  b) Immediate loan
  c) Greater possiblity to negotiate the payment or interest of loan

1. Commercial banks
2. Farmers' home administration
3. Federal land banks
4. Insurance companies
5. Production credit association
6. Merchants and dealers
7. Individuals
8. Finance Companies

TEST

2) Disadvantages

   a) Not dependable

   b) Usually short-termed credit

_____f.

1) Advantages

   a) Low interest rate
   b) Unlimited funds
   c) Pay interest only on amount of time used
   d) Keeps better records

2) Disadvantages

   a) Borrower has to buy shares
   b) Short-term loans
   c) Not conveniently located

_____g.

1) Advantages

   a) Easier for poor risk persons
   b) Immediate loan approval
   c) Short-term loans
   d) Convenience of borrowing

2) Disadvantages

   a) Interest rates extremely high
   b) Usually a straight line interest rate on a longer term
   c) High pressure loan agents

TEST

_____h.

1) Advantages
    a) Long-term mortgages
    b) Low interest rates
    c) Not any upper limits on size of loan except for self-imposed limits
2) Disadvantages
    a) First mortgages
    b) Some states prohibit short-term loans
    c) Selective about areas where loans are made
    d) Can not pay loan back all at once

13. Select from the list below three factors to consider in choosing a source of credit. Check correct factors.

_____a. Time of year

_____b. Amount of the loan

_____c. Area of the state

_____d. Rate of amortizing

_____e. Repayments schedules

_____f. Size of payments

CREDIT MANAGEMENT

UNIT I

ANSWERS TO TEST

1. a. 7
    b. 2
    c. 1
    d. 6
    e. 5
    f. 4
    g. 3

2. a. 2
    b. 1
    c. 3

3. a. Man
    b. Financial position
    c. Repayment capacity
    d. Purpose of loan
    e. Security for loan

4. Any five of the following:
    a. Merchants or dealers of short-term loans
    b. Individual short-term and intermediate loans

ANSWERS TO TEST

c. Commercial banks short-terms and intermediate loans

d. Insurance companies long-term loans

e. Federal Land Bank long-term loans

f. Production Credit Association short-term and intermediate loans

g. Farm Home Administration short-term and intermediate loans

5. a. Character

b. Lending policies

c. Permanence and dependability

d. Experience and knowledge of farming

e. Cost of the loan

6. a. Financing crop and livestock production

b. Financing land

c. Financing farmers' cooperatives

7. a. An additional income

b. An increase in size of operation

c. A product price rise

d. A sufficient repayment capacity

e. An individual's ability as a manager

ANSWERS TO TEST

8. a. Business too small

   b. Low production per unit due to

      1) Poor crop yield

      2) Small calf crop

      3) Small pig crop

      4) Small returns from poultry

   c. Low price per unit sold due to

      1) Poor market

      2) Poor marketing

      3) Poor quality

   d. High cash production costs due to

      1) High feed

      2) High labor

      3) High replacement

   e. High cash overhead due to

      1) Heavy debt load

      2) High interest rate

      3) Heavy taxes

      4) High maintenance costs

9. Any eight of the following:

   a. Check
   b. Draft
   c. Promissory note
   d. Warehouse receipt
   e. Financing statement

ANSWERS TO TEST

f. Security Agreement

g. Installment note

h. Combination collateral note

i. Personal loan application

j. Financial statement for stockmen

10. a. Any three of the following:
    1) Compound interest
    2) Simple interest
    3) Discounted interest
    4) Add-on-interest

    b. $\frac{400}{3,000} \times \frac{24}{2} \times \frac{1}{25} = \underline{\underline{6.4\%}}$

11. a. Cost of money in the money market

    b. Service cost of making records, keeping records, and collecting loans

    c. Risk of loss

12. a. 6
    b. 2
    c. 3
    d. 1
    e. 7
    f. 5
    g. 8
    h. 4

13. b.
    e.
    f.

BUDGETING

UNIT I

FARM BUDGET

TERMINAL OBJECTIVE

Upon completion of this unit, the student will be able to distinguish between complete enterprise and cash flow partial budgets. The student will be able to select and develop a budget that will fit the particular farming or business operation. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms associated with budgeting with the correct definition.
2. Distinguish between complete, partial, enterprise, and cash flow budgets.
3. Name six reasons for budgeting.
4. Name four ways in which a partial budget should be used.
5. Name four possible effects on net income when a change in the farm business takes place.
6. Name the six steps to follow in developing a budget.
7. List six factors which represent physical data in a budget.
8. Name four methods of arriving at price estimates when preparing a budget.
9. List three limitations of most budgets.
10. List six fixed cost factors.
11. List four operating cost factors.
12. List three questions a budget will answer.
13. List two purposes of a cash flow projection.

SPECIFIC OBJECTIVES

14. Calculate a partial budget. (Assignment Sheet #1)

15. Complete a cash flow problem. (Assignment Sheet #2)

16. Complete a cost return projection for finishing steers. (Assignment Sheet #3)

17. Complete a cost return projection for continuous cropped wheat. (Assignment Sheet #4)

18. Complete a cost return projection for winter and graze steers. (Assignment Sheet #5)

19. Complete a cost return projection for farrow and finish swine. (Assignment Sheet #6)

20. Complete a total farm budget. (Assignment Sheet #7)

BUDGETING

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and give to the Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Partial Budget

   TM 2 - Prorated Costs for Annual Basis

   TM 3 - Cash Flow

INSTRUCTIONAL MATERIALS

4. Assignment Sheets
    - #1 - Partial Budget
    - #2 - Cash Flow
    - #3 - Cost Return Projection - Finishing Steers
    - #4 - Cost Return Projection - Continuous Cropped Wheat
    - #5 - Cost Return Projection - Winter and Graze Steers
    - #6 - Cost Return Projection - Farrow-Finish Swine
    - #7 - Total Farm Budget
5. Answers to Assignment Sheet #1
6. Test
7. Answers to Test

References:

1. Castle, Emery N., Farm Business Management, New York: The Macmillan Company.
2. Schneeberger, Kenneth C. and Walker, Odell L., Farm Management - Basic Economic Principles, The Department of Agricultural Economics, Oklahoma State University, Stillwater, Oklahoma.
3. Economics for Agriculture, Department of Agricultural Economics, Vocational Agriculture Service, Urbana, Illinois.
4. Farm Management Guides, Cooperative Extension Service, Kansas State University, Manhattan, Kansas.

BUDGETING

UNIT I

INFORMATION SHEET

I. Terms and Definitions

A. Budgeting - A systematic procedure for making decisions.

B. Farm Budget - A plan for the future use of land, labor, capital, and management resources of the farm.

C. Long-term Budget - A plan which may be realized after a period of change and development (more than one production year.)

D. Short-term Budget - A plan for the use of farm (ranch) resources for the next production period -- generally the year ahead.

E. Present Normal Plan - A plan which refers to the present normal organization and operation.

Note: It is a summary of crop acres and yields, livestock numbers and production, labor requirements, and income and expense items which occur under normal operation, normal weather, and normal economic conditions.

F. Independent Enterprises - Those which do not have any relationship with other enterprises.

G. Competitive Enterprises - Those which compete for a farmer's resources.

Note: When two enterprises are competitive, the production of one enterprise is reduced while the other is increased. Dairying and beef cattle are examples of competitive enterprises. They compete for land, labor, pasture and capital.

H. Complimentary Enterprises - When two enterprises do not compete for the same resources at the same time.

I. Returns to Management - The returns remaining after all variable and fixed costs (other than management) including a charge for labor and land costs have been charged.

J. Return to Labor and Management - The returns remaining after all other variable and fixed costs other than for management and labor (both hired, operator and family labor) have been charged.

INFORMATION SHEET

K. Returns to Land, Labor and Management - The returns remaining after all other variable and fixed costs other than for management, all labor and land have been charged.

L. Gross Farm Income - The income to the business based on sales minus cost of items for resale, such as feeder livestock, plus or minus changes in inventory.

M. Net Farm Income - The Gross Farm Income minus operations expenses including depreciation allowances.

N. Fixed Costs - Represent expenses of an "overhead" nature which do not vary with changes in output for the production period under consideration.

O. Variable Costs - Refer to those expenses which vary with output for the production period under consideration.

P. Total Costs - Are the sum of total fixed and total variable costs.

Q. Assets - Anything of value in the possession of a business, such as machinery and livestock or a claim on something of value in the possession of others, such as a bank deposit and money loaned to others.

R. Liabilities - A claim against a business such as notes, accounts payable and mortgages.

S. Current Assets and Current Liabilities - Assets and liabilities that normally pass through a business within a year's time such as cash, feeder livestock, and notes due within a year.

T. Intermediate Assets and Liabilities - Assets and liabilities that normally pass through a business within a period of one to seven years.

U. Fixed Assets and Liabilities - Assets and liabilities that are of a long-run nature that normally have a duration of eight years or more.

V. Net Worth - Is equal to total assets owned minus the total liabilities.

W. Investment Managed - The value of all resources used in the business.

INFORMATION SHEET

X. Depreciation - Refers to the arbitrary annual proration of the cost of a capital asset to the business over the expected life of the asset.

Y. Balance Sheet - A financial report showing the financial picture of a business of a specific date. It is a listing of assets and liabilities.

Z. Long-Run Profitability - The income producing ability of a business or a segment of a business over a period of eight to ten years or more. Long-run profitability is usually studied through the use of budgets. In the budgeting process, capital expenditures are prorated over the life of the assets by arbitrary depreciation methods.

AA. Short-Run Feasibility - The income generating ability of a business or segment of a business in a short period of time, usually one year to three or five years in length. Short-run feasibility is usually studied through the use of a projected cash flow.

BB. Compounding - Refers to the concept of allowing present costs to increase with time as a basis for comparison with future returns. It can be computed by the formula: $C = c(1 + r)t$, where c equals the cost outlay; r equals the interest rate; and t equals the number of years.

CC. Discounting of Net Present Value - Refers to the concept of reducing future returns with time as a basis for comparison with present costs; and can be computed by the formula: $PV + R/(1 + r)t$, where R equals the future return; r equals the interest rate, and t equals the number of years.

DD. Effective Interest Rate - Refers to the cost of capital considering one's income tax bracket. Eight percent interest with a twenty-five percent income tax bracket gives a six percent effective interest rate: $.08 - (.08 \times .25) = .06$.

II. Types of Budgets (TM 1 and TM 2)

A. Partial - A budget for a small part of the business.

Note: Changes in production, such as increasing and decreasing fertilizer consumption, increasing or reducing an enterprise, and substituting capital for labor, would require the making of a partial budget.

INFORMATION SHEET

B. Complete - A budget for the entire farming operation of business

Note: This might be referred to as total farm budget

C. Enterprise - A budget prepared for a specific agricultural enterprise

D. Cash Flow - A budget which identifies future income and expenses, and also allows for long range planning with the elimination of spots where expenses exceed income

III. Reasons for Farm Budgeting

A. Identifies items that have several years of useful life

B. Allows for experimentation with possible outcome of organizational changes

C. Allows manager to uncover items of cost that might be overlooked

D. Useful when refining present organization

E. Useful when seeking credit

F. Excellent device for learning to organize

IV. Use of Partial Budget

A. Adding to an enterprise

B. Introducing a new enterprise

C. Purchasing a new machine

D. Changing part of the farm business

V. Possible Effects on Net Income When Farm Business Changes (TM 1)

A. Additional costs

B. Reduced returns

C. Additional returns

D. Reduced costs

INFORMATION SHEET

VI. Steps in Developing a Farm Budget

- A. Appraisal of the goals and objectives
- B. Inventory of the farm resources
- C. Selection of enterprises to be budgeted
- D. Selection of physical data to be used in production process
- E. Selection of prices to apply to the physical data
- F. Calculation of the costs and returns

VII. Kinds of Physical Data

- A. Crop yields
- B. Livestock feed requirements and production rates
- C. Labor requirements
- D. Fertilizer and spray responses
- E. Fuel and oil requirements
- F. Seeding responses

  Note: Most of the available data is generally expressed as averages of a number of observations.

VIII. Arriving at Price Estimates

- A. Actual prices for previous year
- B. Projected price based on trends, production cycles, competition, or technology
- C. Arbitrary decision of future prices
- D. Example - Summary of budgets
  - 1. Long-term

Partial	Complete
1. Average prices	1. Average prices
2. "Normal" yields	2. "Normal" yields
3. Receipts that change	3. All receipts
4. Costs that change	4. All costs

INFORMATION SHEET

2. Short-term

Partial	Complete
1. Current or expected prices	1. Current or expected prices
2. Expected yields	2. Expected yields
3. Receipts that change	3. All receipts
4. Costs that change	4. All costs

Note: Actual historical prices for a specified period are perhaps most commonly used in budgeting. This has merit because, even though the general level of prices in the future may turn out to be different from those of the historical period, relative prices will generally be quite similar. If the budget is for a year or two, then current prices would be appropriate.

IX. Limitations of Budgets

A. Comparisons cannot be drawn from budgets of one farm to another

Note: Budget data for a 160-acre farm can be used in budgeting a farm of 320-acres with certain differences in resources and organization that must be adequately accounted for if the end result is to be reliable

B. Budgets deal with future action

Note: It is difficult to make correct estimates on future prices and yields

C. Budget preparation is time consuming

X. Fixed Cost Factors

A. The life of some fixed costs are for more than one year. These costs have to prorated to an annual basis, or for that period of time the budget is being prepared

B. Depreciation

C. Interest

D. Taxes

E. Repairs

F. Insurance

INFORMATION SHEET

XI. Operating Cost Factors (TM 2)

A. Fuel, Oil and Grease

B. Repairs

C. Labor

Note: Labor can in some instances be a fixed cost

Example: Labor furnished by the farmer or his regular help in servicing and repairing the machinery

D. Seed and Fertilizer

XII. Questions a Budget Will Answer

A. Preparing different budgets permits the manager to use economic logic to answer the questions of "What?", "How Much?", and "When?" resources should be used to maximize his objectives

XIII. Cash Flow Projection (TM 3)

A. Purpose

1. To study the annual operating loan needs of a farm business

2. May be used to study short-run feasibility

B. Projection - Projection is made on a period basis. May be monthly, bi-monthly, quarterly, semi-annual or annual basis

C. Instructions to filling out Cash-Flow sheet

1. Annual estimate column should be filled out first

2. Lines 1-18 are cash inflow items

3. Lines 19-36 are farm cash operating expenses

4. Lines 38-41 are used for cash payments for livestock, machinery, equipment, building and land

PARTIAL BUDGET

THE ESTIMATED EFFECT ON ANNUAL NET FARM INCOME FROM SOME PROPOSED CHANGE IN RESOURCE USE:

1. ADDED RECEIPTS $ ______________________

2. REDUCED COSTS $ ______________________

   A. TOTAL ADDED RECEIPTS AND REDUCED COSTS $ ______________

3. ADDED COSTS

   PRORATED $ ______________________

   OPERATING $ ______________________

4. REDUCED RECEIPTS $ ______________________

   B. TOTAL ADDED COSTS AND REDUCED RECEIPTS $ ______________

THE ESTIMATED EFFECT ON INCOME (DIFFERENCE BETWEEN A AND B) $ ______________

PRORATED COSTS FOR ANNUAL BASIS

DEPRECIATION--

$$\frac{\text{ORIGINAL VALUE} - \text{END OR SALVAGE VALUE}}{\text{TIME PERIOD (YEARS)}}$$

INTEREST--

$$\frac{\text{RATE} \times \text{ORIGINAL VALUE}}{2}$$

REPAIRS--

4 PERCENT X ORIGINAL VALUE

TAXES--

MILL RATE X ASSESSED VALUE

INSURANCE--

$$\text{FIRE AND WINDSTORM} = \frac{\text{RATE} \times \text{ORIGINAL VALUE}}{2}$$

LIABILITY AND PERSONAL PROPERTY = COST FOR COVERAGE

OTHER COVERAGE POSSIBLE = COST FOR COVERAGE

CASH FLOW PROJECTION

Name ____________________ Address ____________________ Date Prepared ____________

	CASH INFLOW ITEMS	Annual Estimate	Jan	Feb	Mar	Apr
1	Livestock: CATTLE	$ 25,400			$25,400	
2	MARKET HOGS	46,200		$ 12,500		
3	SOWS	3,200	$ 800			$ 800
4	Crops: WHEAT	11,000			6,000	
5	GRAIN SORGHUM	6,300				
6						
7	Custom (machine) work					
8	Patronage dividends					
9	Agri. Program payments	3,000				
10	Other farm income:					
11						
12						
13						
14	TOTAL FARM CASH INFLOW (Add lines 1-13)	$ 95,100	$ 800	$ 12,500	$ 31,400	$ 800
15	Non-farm business income & wages					
16	Non-farm dividends & interest					
17	Gifts, Inheritance & other non-farm income					
18	TOTAL CASH INFLOW (Except Loans) (Add lines 14-17)	$ 95,100	$ 800	$ 12,500	$ 31,400	$ 800
	CASH OUTFLOW ITEMS					
19	Labor hired	$ 2,300			$ 100	$ 200
20	Repairs, maintenance	4,300	$ 300	$ 500	1,000	400
21	*Interest	6,300		750	800	
22	Rent of farm, pasture	1,200				1,200
23	Feed purchased	15,000		2,000	5,000	
24	Seed, plants purchased	2,100			1,000	500
25	Fertilizer, lime	3,300			2,300	
26	Machine hire	1,300			100	
27	Supplies purchased					
28	Livestock expense	2,700		300	300	
29	Gasoline, fuel, oil	2,300			400	
30	Taxes	2,200				
31	Insurance	500			500	
32	Utilities	600	80	70	50	40
33	Conservation and land clearing expenses	700				700
34	Other: FARM ORG. FEES; PUBLICATIONS, ETC.	400	400			
35						
36						
37	TOTAL FARM CASH OPERATING EXPENSES (Add lines 19-36)	$ 45,700	$ 780	$ 3,620	$ 11,550	$ 3,040
38	*Livestock purchases	$ 19,000				
39	*Machinery, equipment (cash payments, principal)	4,000		2,000		
40	*Buildings (cash payments, principal)	4,800				
41	*Land purchases (cash payments, principal)	2,500				
42	TOTAL FARM CASH OUTFLOW (Add lines 37-41)	$ 76,000	$ 780	$ 5,620	$ 11,550	$ 3,040
43	Family living expenses	8,000	$ 700	$ 600	$ 600	$ 600
44	State income tax	400		400		
45	Federal income tax & social security	3500		3,500		
46	Non-farm business expenses					
47	Other non-farm & family cash outflow					
48	TOTAL CASH OUTFLOW (Lines 42-47) (Except Operating Loan Payments)	$ 87,900	$ 1,480	$ 10,120	$ 12,150	$ 3,640
49	**NET CASH FLOW (+ or -) (Line 18 minus line 48) (Except Loan Receipts and Operating Loan Payments)	$ 7,200	$ - 680	$ 2,380	$ 19,250	$ -2,840
50	PROJECTED OPERATING LOAN BALANCE*** (Oper. Loan Carried Over From Last Period $18,000)	XXXX	$18,680	$ 16,300	$2,950 (surplus)	$ 110 Surplus

*Principal payments on all loans not a part of this operating budget go on lines 38-41. All interest goes on line 21.

**Add negative "Net Cash Flow" figures of each period to "Projected Operating Loan Balance" of previous period to arrive at Operating Loan Balance" of previous period.

***The purpose of line 50 is to provide information for estimating the amount of operating borrowings needed in each period.

Note: To calculate the net cash flow for the farm business alone, subtract line 42 from line 18.

FOR LOAN DETERMINATION

May	June	July	Aug	Sept	Oct	Nov	Dec	Actual Cash Flow	
ESTIMATED TOTAL CASH INFLOW									
									1
$ 11,200			$ 11,500			$ 11,000			2
		$ 800			$ 800				3
		5,000							4
	$ 6,300								5
									6
									7
									8
		3,000							9
									10
									11
									12
									13
$ 11,200	$ 6,300	$ 8,800	$ 11,500		$ 800	$ 11,000			14
									15
									16
									17
$ 11,200	$ 6,300	$ 8,800	$ 11,500		$ 800	$ 11,000			18
ESTIMATED TOTAL CASH OUTFLOW									
$ 400	$ 400	$ 200		$ 300	$ 400	$ 200	100		19
200	500	200		600	300	200	100		20
2,000			$ 750			2,000			21
									22
2,000			2000			4,000			23
							600		24
							1,000		25
	300	400			500				26
									27
300	200		400		600	400	200		28
	700		800			400			29
	1,350						1,350		30
									31
40	30	30	40	40	50	60	70		32
									33
									34
									35
									36
$ 4,940	$ 3,480	$ 830	$ 3,990	$ 940	$ 1,850	$ 7,260	$ 3,420		37
					$ 19,000				38
			$ 2,000						39
2,400						$ 2,400			40
		$ 2,500							41
$ 7,340	$ 3,480	$ 3,330	$ 5,990	$ 940	$ 20,850	$ 9,660	$ 3,420		42
$ 700	$ 600	$ 600	$ 800	$ 800	$ 600	$ 600	$ 800		43
									44
									45
									46
									47
$ 8,040	$ 4,080	$ 3,930	$ 6,790	$ 1,740	$ 21,450	$ 10,260	$ 4,220		48
$ 3,160	$ 2,220	$ 4,870	$ 4,710	$ -1,740	$ -20,650	$ 740	$ -4,220		49
270 (Surplus)	$ 5,490 (Surplus)	$ 10,360 (Surplus)	$ 15,070 (surplus)	$ 13,330 (Surplus)	$ 7,320	$ 6,580	$ 10,800		50

Projected Operating Loan Balance for each period. Similarly, subtract positive Net Cash Flow figures from Projected

The cash inflow and outflow items above do not include receipt or payment of operating loans.

BUDGETING

UNIT I

ASSIGNMENT SHEET #1: Partial Budget

A. Problem:

You want to set up a partial budget to help decide whether it will pay you to include more roughage in the rotation and feed an additional 40 steers for which you have space, equipment, and labor. Assume that the latter items have no alternative use and do not make a charge for them. The value of production (sales value - purchase value) will amount to $125 per steer, but the reduced value of grain production will amount to $1,750 for the farm. (Estimating $125 as value of production per steer is another short cut, rather than subtracting purchase cost from sales value.) Each steer will be fed $70 worth of concentrates, plus hay which has no other use. (Since the hay would not be sold or otherwise used, do not include a value of it in the partial budget.)

Interest will amount to $10 per steer. Taxes and miscellaneous costs are estimated at $3 per head. Fertilizer costs and fuel and repair costs on machinery will be reduced by $450 as a result of the change in the cropping system. What will be the effect on the net income for the farm if you make the change?

B. Solution:

Additional Costs

Concentrates
$70 x 40 steers ______________

Interest
$10 x 40 steers ______________

Taxes and Misc.
$3 x 40 steers ______________

Reduced Returns

Reduced grain production ______________

A. Total Annual additional costs and reduced returns ______________

Additional Returns

Value of Production
$125 x 40 steers ______________

Reduced Costs

Fertilizer costs and fuel repair cost on machinery ______________

B. Total Annual additional returns and reduced costs. ______________

- ______________

Net Change in income (B minus A) + ______________

BUDGETING

UNIT I

ASSIGNMENT SHEET #2: Cash Flow

Mr. J. P. Recorder has requested your assistance in preparing a projected annual cash flow for the year. He believes that if you help him prepare the annual projection, he will be able to allocate the totals on a monthly basis to use as a tool in planning his annual operating credit needs with his banker. The only change he plans in the operation is to increase the number of steer calves from 400 to 500.

J. P. figures he will be selling the following in the coming year:

450 market hogs averaging 200# @ ____________________

30 cull sows averaging 400# @ ____________________

400 feeder steers weighing 700# (already sold at ______/cwt.)

9,000 bushels of wheat @ ____________________

2,000 bushels of grain sorghum @ ____________________

His operating expenses reported on his last three tax returns are attached.

Other Expenditures he anticipates are:

Steer Calves 450# purchases 500 head	____________
Machinery Principal Payment	____________
Buildings Principal Payment	____________
Land Purchase Principal Payment	____________
Family Living Expense	____________
State Income Tax	____________
Federal Income Tax and Social Security	____________

ASSIGNMENT SHEET #2

Figures to use for the Cash Flow Problem.

Market Hogs	$ .45 lb.
Cull Sows	$ .36 lb.
Feeder Steers	$ .80 lb.
Wheat	$ 3.50/bushel
Grain Sorghum	$ 3.00/cwt.
Steer Calves Costs	$ .95
Machinery Payment	$ 5,000.00
Building Payment	$ 6,000.00
Land Purchase	$ 4,000.00
Family Living	$10,000.00
State Income Tax	$ 500.00
Federal Income Tax and Social Security	$ 6,000.00

ASSIGNMENT SHEET #2

FARM INCOME & EXPENSES

Name ______________________________ Soc. Sec. No. ______________

Address ____

Part II. Farm Deductions

		1976	1977	1978
29	Labor Hired	1,500	1,700	2,050
30	Repairs, Maintenance	2,650	2,500	3,300
31	Interest	6,400	6,500	5,800
32	Rent	800	900	1,200
33	Feed Purchase	11,100	11,600	17,000
34	Seeds, Plants	1,600	1,700	1,900
35	Fert., Lime	1,800	2,800	2,900
36	Mach. Hire	400	500	900
37	Livestock Exp.	2,300	2,400	2,700
40	Gas, Fuel, Oil	1,400	2,250	3,100
42	Taxes	2,400	2,450	2,600
43	Insurance	400	450	450
44	Utilities	350	400	550
46	Conser. Exp.	800	400	1,000

BUDGETING

UNIT I

ASSIGNMENT SHEET #3: Cost Return Projection - Finishing Steers

		EXAMPLE Per Head	YOUR FARM Per Head
RETURNS:			
Steer (1090 lbs. @ $ 50)	(1)	$ 545.00	
Cost of Feeder (700 lbs. @ $ 56)	(2)	- 392.00	
Less Death Loss (1%)	(3)	- 3.92	
Gross Returns	(4)	$ 149.08	
VARIABLE COSTS:			
Feed[1]	(5)	$ 140.80	
Pasture (Summer)	(6)		
Veterinary and Drugs	(7)	3.50	
Gas, Oil, and Utilities	(8)	4.50	
Labor (2.5 hours at $ 3.50 /hr.)	(9)	8.75	
Marketing Costs (3% of Line 1)	(10)	16.35	
Repairs	(11)	3.00	
Interest on Livestock and ½ Variable Costs @ 9%[2]	(12)	18.02	
TOTAL VARIABLE COSTS	(13)	$ 194.92	
FIXED COSTS: (Equipment and Buildings)			
Depreciation (15 years) ($100 ÷ 15 yrs.)	(14)	$ 6.67	
Interest, Taxes, and Insurance (6% of investment)	(15)	6.00	
TOTAL FIXED COSTS	(16)	$ 12.67	
TOTAL COSTS (Line 13 plus Line 16)[3]	(17)	$207.59	
TOTAL COST PER CWT. GAIN[3]	(18)	$ 53.23	
RETURN TO MANAGEMENT (Line 4 minus Line 17	(19)	(−$ 58.51)	
RETURN TO LABOR AND MANAGEMENT (Line 19 plus Line 9)	(20)	(−$ 49.76)	

---

[1] Feed costs: 51 bu. grain sorghum × $2.00/bu. = $102.00; 150 lbs. supplement × $ .10/lb. $15.00; 450 lbs. alfalfa × $45.00/ton = $10.15; 30 lbs. mineral and salt × $ .03/lb. = $ .90; plus processing of grain @ $ .25/bu. = $12.75.

[2] Interest calculated for a 5-month period.

[3] Costs do not include a return to management and risk.

BUDGETING

UNIT I

ASSIGNMENT SHEET #4:

Cost Return Projection - Continuous Cropped Wheat

		EXAMPLES (Per Acre) CENTRAL	EXAMPLES (Per Acre) EASTERN	YOUR FARM (Per Acre)
Yield Per Acre		32 bu.	40 bu.	
RETURNS:				
Yield ____ X $3.00	(1)	$96.00	$120.00	$
VARIABLE COSTS[1]				
Labor (____ hr. X $3.50)	(2)	$ 6.30	$ 8.40	
Seed (____ lbs. X $.06)	(3)	3.60	4.00	
Herbicide and Insecticide	(4)	1.00	1.00	
Fertilizer and Lime	(5)	12.00	16.80	
Fuel and Oil	(6)	5.50	6.45	
Machinery and Equipment Repairs	(7)	7.50	9.20	
Crop Insurance	(8)			
Custom Hire	(9)	5.00	2.75	
Miscellaneous	(10)	2.50	3.00	
Interest on ½ Operating Capital @ 9%	(11)	1.95	2.32	
TOTAL VARIABLE COSTS	(12)	$45.35	$53.92	$
FIXED COSTS:				
Real Estate Taxes[2]	(13)	$ 4.00	$ 5.50	
Interest on Land (6%)	(14)	33.00	42.00	
Rent for Rented Land	(15)			
Depreciation on Crop Machinery[3] (Depreciation ÷ Crop Acres)	(16)	12.50	15.50	
Other Machinery Ownership Costs[4]	(17)	6.00	7.45	
TOTAL FIXED COSTS	(18)	$55.50	$70.45	$
TOTAL COSTS (Line 12 + line 18)[5]	(19)	$100.85	$124.37	$
TOTAL COST PER BUSHEL[5]	(20)	$ 3.15	$ 3.11	$
RETURN TO MANAGEMENT (Line 1 — line 19)	(21)	(-$ 4.85)	(-$ 4.37)	$
RETURN TO LABOR AND MANAGEMENT (Line 21 + line 2)	(22)	$ 1.45	$ 4.03	$
RETURN TO LAND, LABOR AND MANAGEMENT (Line 22 + line 14 or line 15)	(23)	$34.45	$46.03	$

---

[1] Cost estimates based in part on data from Farm Management Association farms[2]

[2] On rented land, land costs are represented by rent, therefore, when computing costs on rented land, leave lines 13 and 14 blank

[3] If original cost of crop machinery is unknown, use previous year's depreciation divided by total crop acres

[4] Machinery ownerships costs calculated by multiplying machinery depreciation by 8 times 6%

[5] Costs do not include a charge for management and risk

BUDGETING

UNIT I

ASSIGNMENT SHEET #5:

Cost Return Projection - Winter and Graze Steers

		EXAMPLE Per Head	YOUR FARM Per Head
RETURNS:			
Steer (830 lbs. @ $54.00)	(1)	$ 448.20	
Cost of Feeder (400 lbs. @ $65.00)	(2)	- 260.00	
Less Death Loss (2%)	(3)	- 5.20	
Gross Returns	(4)	$ 183.00	
VARIABLE COSTS:			
Feed[1]	(5)	$ 85.35	
Pasture (Summer)	(6)	42.50	
Veterinary and Drugs	(7)	3.00	
Gas, Oil, and Utilities	(8)	3.00	
Labor (4 hours at $3.50/hr.)	(9)	14.00	
Marketing Costs (3% of Line 1)	(10)	13.45	
Repairs	(11)	3.25	
Interest on Livestock and ½ Variable Costs @ 9%[2]	(12)	30.81	
TOTAL VARIABLE COSTS	(13)	$ 195.36	
FIXED COSTS: (Equipment and Buildings)			
Depreciation (15 years)	(14)	$ 7.32	
Interest, Taxes, and Insurance (6% of investment)	(15)	6.60	
TOTAL FIXED COSTS	(16)	$ 13.93	
TOTAL COSTS (Line 13 plus Line 16)[3]	(17)	$ 209.29	
TOTAL COST PER CWT. GAIN	(18)	$ 48.67	
RETURN TO MANAGEMENT (Line 4 minus Line 17	(19)	(- $ 26.29)	
RETURN TO LABOR AND MANAGEMENT (Line 19 plus Line 9)	(20)	(- $ 12.29)	

[1] Feed Costs: 360 lbs. supplement $ .10 lb $36.00; 3.6 tons silage $13.50 ton $48.60; 25 lbs. mineral and salt $ .03 lb. $ .75.

[2] Interest calculated over a 12-month period.

[3] Costs do not include charge for management and risk.

BUDGETING

UNIT I

ASSIGNMENT SHEET #6: Cost Return Projection - Farrow-Finish Swine

Cost-Return Projection

The cost-return projection provides a guideline for swine producers or prospective producers for planning possible expansion or addition of swine production projects. Variable costs are based in part on Kansas State University Farm Management Association summaries. Feed costs are based on feed requirements listed by KSU swine research and extension specialists.

Interest on breeding livestock and variable costs (line 12 of budget) is calculated at 9 percent. Interest on variable costs from lines 4-11 is calculated at 9 percent for one-half year, with breeding livestock investment at $125 per litter.

COST-RETURN PROJECTION—FARROW-FINISH SWINE PROJECT

		EXAMPLE Per Litter	YOUR FARM Per Litter
Estimated Returns			
Market Hogs— 7 Market Hogs (230#) @ $42/cwt.[1]	(1)	$676.20	$
Cull Sows—100#/litter	(2)	32.00	
Gross Returns	(3)	$708.20	$
VARIABLE COSTS:			
Feed[2]	(4)	$420.50	$
Labor—Hired and Operators[3]	(5)	42.00	
Livestock Exp. Inc. Veterinarian[4]	(6)	16.92	
Utilities	(7)	10.12	
Machinery Exp. Inc. Auto	(8)	1.14	
Fuel and Oil	(9)	4.91	
Repairs on Buildings and Equipment	(10)	16.51	
Personal Taxes, Insurance, Fees and Dues	(11)	7.07	
Int. on Breeding Livestock and ½ Variable Costs[5]	(12)	17.31	
TOTAL VARIABLE COSTS	(13)	$536.48	$
FIXED COSTS:			
Depreciation—Equipment and Buildings[6]	(14)	$ 48.66	$
Interest on Equipment and Buildings[7]	(15)	14.61	
Taxes and Insurance	(16)	4.87	
TOTAL FIXED COSTS	(17)	$ 68.14	$
TOTAL VARIABLE AND FIXED COSTS[8]	(18)	$604.62	$
TOTAL COSTS PER HOG MARKETED[8]	(19)	$ 86.37	$
TOTAL COST PER CWT. MARKETED[8]	(20)	$ 37.55	$
RETURN TO MANAGEMENT (Line 3 minus Line 18)	(21)	$104.00	$
RETURN TO LABOR AND MANAGEMENT (Line 21 plus Line 5)	(22)	$146.00	$

---

[1] 7 market hogs (after 2% death loss) weighing 230 lbs. X $42/cwt. Costs shown for 1610 lbs. of market hogs sold per litter.

[2] Feed: Grain sorghum 94 bu. X $2/bu. = $188; Protein supplement 1400 lbs. X $10/cwt. = $140, 200 lbs. alfalfa X $45/T. = $4.50; pre-creep 50 lbs. X $16/cwt. = $8; 400 lbs. creep X $12.50/cwt. = $50; share of boar feed $6/litter. Feed processing at $.25/bu. = $24.

[3] Total labor calculated on 12 hrs/litter. Labor at $3.50/hr.

[4] Includes marketing and other livestock expense.

[5] Breeding livestock plus one half of variable costs for 6 months: $125 + ($519.17 divided by 2) X 9% X ½ year = $17.31

[6] Investment per litter: ($58,400 ÷ 10 yrs.)—120 litters = $48.66/litter

[7] Interest on average investment: $487 divided by 2 X 6% = $14.61

[8] Costs do not include a charge for management and risk.

BUDGETING

UNIT I

ASSIGNMENT SHEET #7: Total Farm Budget

Fill out a complete budget using the information given and using the Total Farm Budget Form on the following page.

Income:

Cattle	$25,400
Market Hogs	46,000
Sows	3,200
Wheat	11,000
Grain Sorghum	6,300
Agr. Program	3,000

Expenses:

Labor	$ 2,300
Repairs	4,300
Interest	6,300
Rent	1,200
Feed	15,000
Seeds	2,100
Fertilizer	3,300
Machine Hire	1,300
Livestock Expense	2,700
Gasoline, Fuel	2,300
Taxes	2,700
Insurance	500
Utilities	600
Conservation Work	700
Other	400

ASSIGNMENT SHEET #7

Total Farm Budget

Receipts

Crop sales	$__________
Livestock sales	__________
Other income	__________
Total Receipts	$__________

Expenses

Livestock purchases	$__________
Feed bought	__________
Hired labor	__________
Fuel and Oil	__________
Repairs	__________
Truck and machine hire	__________
Vet and livestock supplies	__________
Seed and crop supplies	__________
Taxes, interest, and insurance	__________
Depreciation	__________
Other expenses	__________
Total Expense	$__________
Net Farm Income	$__________

ANSWERS TO ASSIGNMENT SHEET #1

Solution:

Additional Costs		Additional Returns	
Concentrates $70 x 40 steers	$2,800	Value of Production $125 x 40 steers	$5,000
Interest $10 x 40 steers	$ 400		
Taxes and Misc. $3 x 40 steers	$ 120		

Reduced Returns		Reduced Costs	
Reduced Grain Production	$1,750	Fertilizer costs and fuel and repair cost on machinery	$ 450
A. Total Annual Additional costs and reduced returns	$5,070	B. Total Annual Additional returns and reduced costs	$5,450
			-$5,070
		Net Change in Income (B minus A)	+$ 380

BUDGETING

UNIT I

TEST

1. Match the terms on the right to the correct definition.

____a. A systematic procedure for making decisions

____b. The expenses incurred in operating a farm business

____c. A plan for the future use of land, capital and management resources of the farm

____d. Those costs that occur regardless of production

____e. A plan which may be realized after a period of change and development (more than one production year)

____f. A plan for the use of farm (ranch) resources for the next production period - generally the year ahead.

____g. The plan which refers to the present normal organization and operation

____h. The enterprises which compete for a farmer's resources

____i. The enterprises which do not have any relationship with other enterprises

____j. The income to the business based on sales minus costs of items for resale

____k. Refers to those expenses which vary with output for the production period under consideration

____l. Anything of value in the possession of a business

____m. Is equal to total assets owned minus total liabilities

1. Present normal plan
2. Budgeting
3. Farm Budget
4. Operational costs
5. Long-term budget
6. Fixed costs
7. Short-term budget
8. Independent enterprises
9. Competitive enterprises
10. Net Worth
11. Assets
12. Gross Farm Income
13. Balance Sheet
14. Variable costs
15. Short-run feasibility
16. Liabilities

TEST

______n.	A financial report showing the financial picture of a business on a specific date	15. Short-run feasibility
______o.	Claims against a business	16. Liabilities
______p.	The income generating ability of a business or segment of a business in a short period time (1-3 years)	

2. Distinguish between complete, partial, enterprise, and cash flow budgets.

3. Name six reasons for budgeting.

4. Name three ways in which a partial budget should be used.

   a.

   b.

   c.

5. Name four possible effects on net income when a change in farm business takes place.

   a.

   b.

   c.

   d.

TEST

6. Name the six steps to follow in developing a budget.

a.

b.

c.

d.

e.

f.

7. Place and "X" in the blank if the statement represents physical data in the budget.

____a. Crop Yields

____b. Breeding Livestock

____c. Fuel and Oil Requirements

____d. Taxes

____e. Insurance

____f. Fertilizer and Spray Responses

8. Name four methods of arriving at price estimates when preparing a budget.

a.

b.

c.

d.

9. Which of the follosing statements represents limitations of most budgets? Place an "X" in the blank.

____a. Budgets deal with future action.

____b. Allows manager to uncover items of cost that might be overlooked.

____c. Budget Preparation is time consuming.

TEST

9. (cont'd.)

____d. Useful when seeking credit.

____e. Comparisons cannot be drawn from budgets of one farm to another.

10. Place and "X" in the blank if the term represents fixed cost factor.

____a. Fuel, oil and grease

____b. Interest

____c. Taxes

____d. Repairs

____e. Depreciation

____f. Labor

11. Place an "X" in the blank if the term represents an operating cost factor.

____a. Shelter

____b. Repairs

____c. Depreciation

____d. Labor

____e. Interest

____f. Fuel, oil and grease

12. List three questions a budget will answer.

a.

b.

c.

13. List two other purposes of a cash flow projection.

TEST

14. Complete a partial budget problem. (Assignment Sheet #1)

15. Complete a cash flow problem. (Assignment Sheet #2)

16. Complete a cost return projection for finishing steers. (Assignment Sheet #3)

17. Complete a cost return projection for continuous cropped wheat. (Assignment Sheet #4)

18. Complete a cost return projection for winter and graze steers. (Assignment Sheet #5)

19. Complete a cost return projection for farrow and finish swine. (Assignment Sheet #6)

20. Complete a total farm budget. (Assignment Sheet #7)

BUDGETING

UNIT 1

ANSWERS TO TEST

1. 2 a.
   4 b.
   3 c.
   6 d.
   5 e.
   7 f.
   1 g.
   8 h.
   8 i.
   12 j.
   14 k.
   11 l.
   10 m.
   13 n.
   16 o.
   15 p.

2. Complete, Partial, Enterprise, Cash Flow Budget

   A. Partial - A budget for a small part of the business

   Note: Changes in production, such as increasing and decreasing fertilizer consumption, increasing or reducing an enterprise, and substituting capital for labor, would require the making of a partial budget

   B. Complete - A budget for the entire farming operation of business

   Note: This might be referred to as total farm budget

   C. Enterprise - A budget prepared for a specific agricultural enterprise

   D. Cash Flow - A budget which identifies future income and expenses, and also allows for long range planning with the elimination of spots where expenses exceed income

3. Name six reasons for budgeting

   a. Identifies items that have several years of useful life

   b. Allows for experimentation with possible outcome of organizational changes

   c. Allows manager to uncover items of cost that might be overlooked

ANSWERS TO TEST

d. Useful when refining present organization

e. Useful when seeking credit

f. Excellent device for learning to organize

4. Name three ways in which a partial budget should be used

a. Adding to an enterprise

b. Introducing a new enterprise

c. Purchasing a new machine

d. Changing part of the farm business

5. Name four possible effects on net income when a change in farm business takes place.

a. Additional costs

b. Reduced returns

c. Additional returns

d. Reduced costs

6. Name the six steps to follow in developing a budget.

a. Appraisal of the goals and objectives

b. Inventory of the farm resources

c. Selection of enterprises to be budgeted

d. Selection of physical data to be used in the production process

e. Selection of prices to apply to the physical data

f. Calculation of the costs and returns

7. Place an "X" in the blank if the statement represents physical data in a budget.

_X_ a. Crop Yields

_X_ c. Fuel and Oil Requirements

_X_ d. Fertilizer and Spray Responses

ANSWERS TO TEST

8. Name four methods of arriving at price estimates when preparing a budget.

   a. Actual prices for previous year

   b. Projected price based on trends, production cycles, competition, or technology

   c. Arbitrary decision of future prices

   d. Example - Summary of budgets

      1. Long-term

Partial	Complete
1. Average prices	1. Average prices
2. "Normal" yields	2. "Normal" yields
3. Receipts that change	3. All receipts
4. Costs that change	4. All costs

      2. Short-term

Partial	Complete
1. Current or expected	1. Current or expected
2. Expected yields	2. Expected yields
3. Receipts that change	3. All receipts
4. Costs that change	4. All costs

   Note: Actual historical prices for a specified period are perhaps most commonly used in budgeting. This has merit because, even though the general level of prices in the future may turn out to be different from those of the historical period, relative prices will generally be quite similar. If the budget is for a year or two, then current prices would be appropriate.

9. Which of the following statements represents limitations of most budgets? Place an "X" in the blank.

   X a. Budgets deal with future action

   X c Budget preparation is time consuming

   X e. Comparisons cannot be drawn from budgets of one farm to another.

ANSWERS TO TEST

10. Place an "X" in the blank if the term represents fixed cost factor.

    X b. Interest

    X c. Taxes

    X d. Repairs

    X e. Depreciation

11. Place an "X" in the blank if the term represents an operating cost factor.

    X b. Repairs

    X d. Labor

    X f. Fuel, oil and grease

12. List three questions a budget will answer.

    a. What?

    b. How Much?

    c. When?

13. List two other purposes of a cash flow projection.

    a. To study the annual operating loan needs of a farm business.

    b. May be used to study short run feasibility.

14. Complete Assignment Sheet #1 to the satisfaction of the instructor.

15. Complete Assignment Sheet #2 to the satisfaction of the instructor.

16. Complete Assignment Sheet #3 to the satisfaction of the instructor.

17. Complete Assignment Sheet #4 to the satisfaction of the instructor.

18. Complete Assignment Sheet #5 to the satisfaction of the instructor.

19. Complete Assignment Sheet #6 to the satisfaction of the instructor.

20. Complete Assignment Sheet #7 to the satisfaction of the instructor.

BUDGETING

UNIT II

PERSONAL BUDGET

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to list the purposes of a budget, the general rules of budgeting and identify the factors that affect family living. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, the student will be able to:

1. List six purposes of a personal budget.
2. Name six general rules of personal budgeting.
3. Name the two main parts of a personal budget.
4. List four factors that have an effect on family living costs.
5. List the eight major expense items in a personal budget.
6. Complete a personal financial inventory. (Assignment Sheet #1)
7. Complete a monthly worksheet. (Assignment Sheet #2)
8. Complete a yearly personal budget. (Assignment Sheet #3)

BUDGETING

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and give to the instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Total U.S. Consumer Expenditures
   TM 2 - Estimates of Spending by Low Income Family
   TM 3 - Summary of Annual Budgets for Four Person Family
   TM 4 - Estimated Annual Cost to Run a Medium-Size Car

INSTRUCTIONAL MATERIALS

4. Assignment Sheets

   #1 - Personal/Family Inventory Sheet

   #2 - Worksheet for Family Spending

   #3 - Yearly Personal Budget

5. Test

6. Answers to Test

References:

1. Wolfe, Harold A., Personal Finance, Fifth Edition, Allyn and Bacon, Inc., 470 Atlantic Avenue, Boston, Massachusetts 02210.

2. Doyen, Lee W., Credit and Finance, Fourth Edition, Cloud County Community College, Concordia, Kansas 66701.

BUDGETING

UNIT II

INFORMATION SHEET

I. Purposes of a Personal Budget

  A. A financial tool

  B. Requires planning

  C. An estimate of future receipts and disbursements

  D. A financial guide to spending

  E. May be developed for a family or an individual

  NOTE: Family budget - all family members should be involved in decision

  F. May be revised to fit needs

  G. Includes income and expenditures

  H. A financial plan on a monthly basis

II. General Rules of Personal Budgeting

  A. Set your goals

  B. Fixed items of expenditures must be provided for first

  C. Big expense items and other must items have to be spread over several months

  D. A major expense cannot be cut just because it is large

  E. Budget should help to develop a set of priorities with respect to general items of expenditures, but need not consist of a detailed set of accounts showing where every penny is spent

III. Main Parts of a Personal Budget

  A. Income

INFORMATION SHEET

1. Every budget begins with income
2. Use "take home" pay
3. Working wife income - Question: Part of permanent budget or to go into savings? Each family must decide
4. Varying income - must be estimated on conservative side

B. Expenditures (three general areas)

1. Fixed items should be listed first
    - a. Installment payments
    - b. Rents or mortgage payments
    - c. Utilities
    - d. Clothing
    - e. Food
2. Priorities
    - a. Individuals and families have different priorities for various items in the budget
    - b. There is no "right" way to list priorities
3. Savings
    - a. Not all income should be consumed
    - b. Be wise - pay yourself first
    - c. Saving is hard to do

IV. Factors Affecting Family Living Costs (TM 1 and TM 2)

A. Stage in the family life cycle - Example: Those families with high school or college-aged children have the highest family living expenditures

INFORMATION SHEET

B. Family living expenditures rise with net income

C. The larger the family, the greater the family living expenditures

D. Increases in the cost of living

V. Main Expense Items in the Personal Budget (TM 3)

A. Food - estimates should be made, not only of food eaten at home, but also, for meals eaten out

B. Household Operation

1. Services, such as fuel, water, gas, electricity, telephone

2. Must be considered different from house expenses

C. Clothing

1. Generally clothing is seasonal

2. Size of family will affect clothing bill

3. Type of work husband and/or wife are engaged in will affect the clothing budget

D. Contribution - monies given to churches, charities, or certain civic groups

E. Shelter

1. Wide variation of money spent on housing within any income group

2. Size of family - large families tend to spend less on housing within any income group

3. Social and ethnic reasons - some families prefer to spend more on housing than do others within the same income group

F. Transportation (TM 4)

1. Cost of transportation is growing

INFORMATION SHEET

2. Distance from schools, jobs, markets is a factor in transportation costs
3. Number of commuting family members
4. Availability of other forms of transportation
5. Monthly payments are a fixed cost
6. Auto insurance should be prorated
7. Repairs also should be prorated

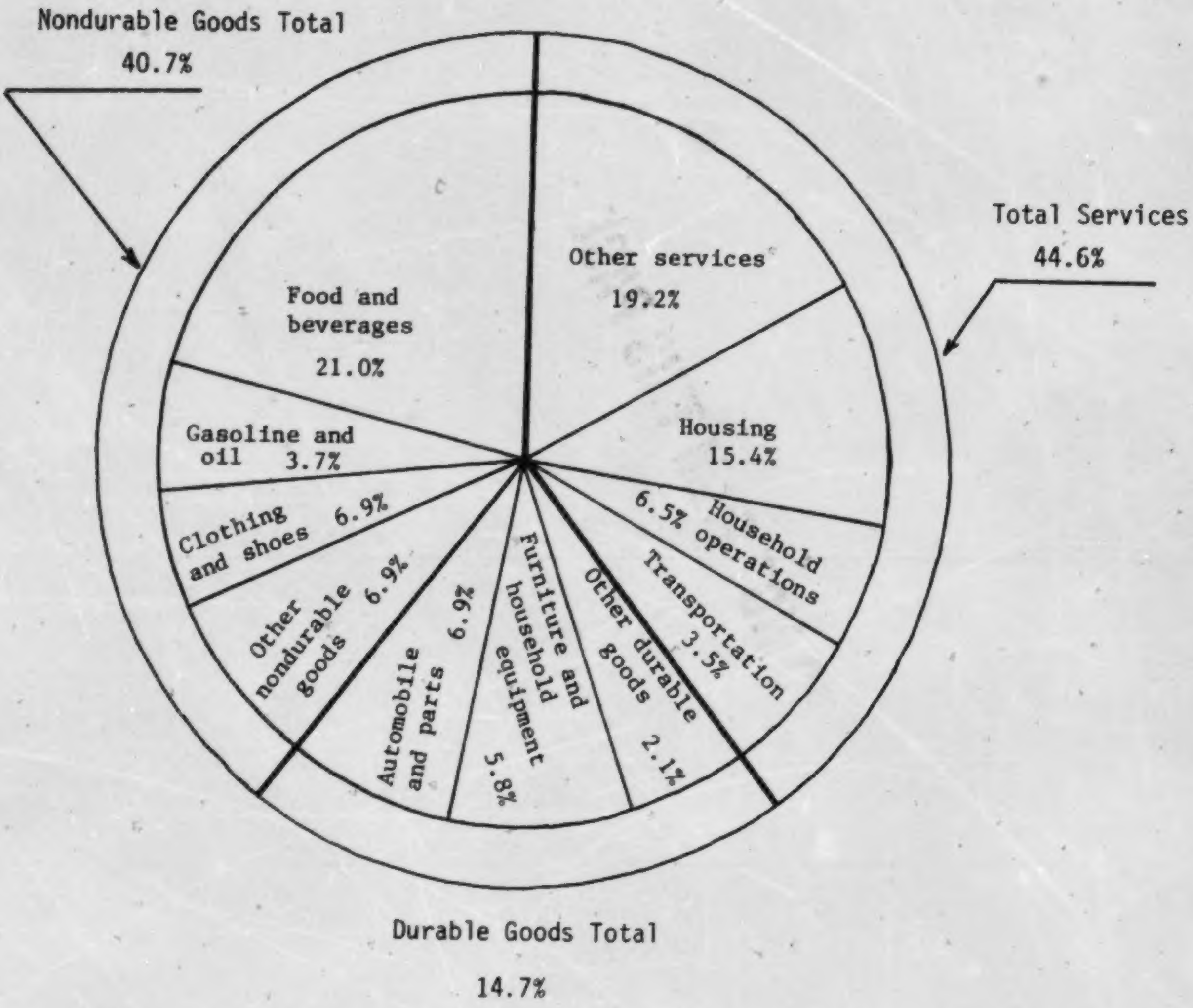
G. Personal

1. Insurance (health, life)
2. Education
3. Family entertainment
4. Dues and fees

H. Savings and Investments

1. A savings feature built into a budget will assure that a person ends up a net saver
2. A systematic investment program should be initiated as soon as funds are available

Total U.S. Consumer Expenditures



ESTIMATES OF SPENDING BY LOW INCOME FAMILY

	INCOME AFTER TAXES	
	$6,000 TO $7,500 PERCENT	$8,000 TO $10,000 PERCENT
TOTAL	100	100
SAVINGS	2	4
PERSONAL INSURANCE	5	4
GIFTS AND CONTRIBUTIONS	4	4
TOTAL FOR CURRENT LIVING	89	87
FOOD AND BEVERAGES	24	21
SHELTER (RENT OR MORTGAGE INTEREST PAYMENTS AND UPKEEP, INSURANCE AND TAXES)	12	11
FUEL AND UTILITIES	5	4
HOUSEHOLD OPERATION	5	5
HOUSEFURNISHINGS AND EQUIPMENT	4	5
CLOTHING	8	9
TRANSPORTATION	15	14
MEDICAL CARE	6	6
EDUCATION AND READING	1	2
RECREATION	3	4
PERSONAL AND MISCELLANEOUS	6	6

Summary of Annual Budgets for Four Person Family

	Lower Budget	Intermediate Budget	Higher Budget
Total Budget	$10,041	$16,236	$23,759
Total family consumption	8,162	12,370	17,048
FOOD	3,003	3,859	4,856
HOUSING	1,964	3,843	5,821
TRANSPORTATION	767	1,403	1,824
CLOTHING	799	1,141	1,670
PERSONAL CARE	265	355	503
MEDICAL CARE	896	900	939
OTHER FAMILY CONSUMPTION	468	869	1,434
OTHER ITEMS	451	731	1,234
TAXES AND DEDUCTIONS	1,429	3,134	5,476
SOCIAL SECURITY AND DISABILITY	604	898	911
PERSONAL INCOME TAXES	8,251	2,236	4,565

SOURCE: Bureau of Labor Statistics News, U.S. Department of Labor (USDL: 77-369) April 27, 1977, p. 2.

ESTIMATED ANNUAL COST TO RUN MEDIUM-SIZED CAR

VARIABLE COSTS	AVERAGE PER MILE
GASOLINE AND OIL	4.82 CENTS
MAINTENANCE	.97 CENTS
TIRES	.66 CENTS
	6.45 CENTS

FIXED COSTS	ANNUALLY
FIRE AND THEFT INSURANCE ($50 DED.)	$ 53.00
$100 DED. COLLISION INSURANCE	141.00
PROPERTY DAMAGE AND LIABILITY ($100/300/25M)	189.00
LICENSE AND REGISTRATION	30.00
DEPRECIATION	773.00
	$1,186.00
	(OR $3.25 PER DAY)

FOR AIR CONDITIONING, ADD .20 CENTS PER MILE
AND $.20 PER DAY.

FOR MILAGE IN EXCESS OF 15,00 ANNUALLY, AN ADDITIONAL DEPRECIATION ALLOWANCE OF $32.00 PER THOUSAND SHOULD BE ADDED TO THE FIXED COSTS.

THE DEPRECIATION AMOUNT OF $773.00 IS AN AVERAGE ANNUAL FIGURE BASED ON CAR TRADE-IN VALUE OF THE CHEVELLE MALIBU CLASSIC AT THE END OF FOUR YEARS OR 60,000 MILES WHICH EVER POINT OCCURS FIRST. THIS IS THE APPROXIMATE DURATION OF THE MOST ECONOMICAL SERVICE PERIOD DURING WHICH THE CAR IS EXPECTED TO DELIVER THE GREATEST OVERALL COST ECONOMY.

USING THE ABOVE FIGURES, IT IS FAIRLY EASY TO COMPUTE ANNUAL DRIVING COSTS, AND IT CAN BE SHOWN THAT THE AMOUNT OF DRIVING HAS A DIRECT RELATIONSHIP TO THE COST PER MILE OF DRIVING. FOR EXAMPLE, THE AVERAGE MOTORIST DRIVES ABOUT 10,000 MILES A YEAR, WHICH RESULTS IN THE FOLLOWING APPROXIMATE COSTS:

10,00 MILES AT 6.45 CENTS	$ 645.00
365 DAYS AT $3.25	1,186.00
	$1,831.00
	(OR 18.3 CENTS PER MILE)

ESTIMATED ANNUAL COSTS OF RUNNING A MEDIUM-SIZED CAR - CONTINUED

IN CONTRAST, A CAR DRIVEN TWICE AS FAR DURING THE SAME PERIOD OF TIME WOULD COST:

20,000 MILES AT 6.45 CENTS	$1,290.00
365 DAYS AT $3.25	1,186.00
5,000 MILES AT $32/THOUSAND	160.00
	$2,636.00
	(OR 13.2 CENTS PER MILE)

SOURCE: AAA, "YOUR DRIVING COSTS," 1975-76, P. 5. USED BY PERMISSION.

BUDGETING

UNIT II

ASSIGNMENT SHEET #1: Personal/Family Inventory Sheet

Fill in your own personal budget entry for each item on the Inventory Sheet.

Assets	Example	Own Budget Entry
Cash (inc. checking accounts)	$750	
Saving deposits (inc. Certificates of Dep.)	2,000	
Life insurance (estimated cash surrender value)	5,000	
Annuities (est. cash surrender value)	4,000	
Gov. sec. of all kinds	--	
Tax-exempt state and local securities	--	
Corporation bonds	--	
Common Stock	5,000	
Mutual Funds	1,000	
Real estate (owner occupied)	30,000	
Rental Property	--	
Other long-term business assets	--	
Short-term business assets (e.g. accts. receivable)	--	

Liabilities	Example	Own Budget Entry
Mortgage on owner-occupied home	$25,000	
Other mortgages	--	
Notes & loans payable (inc. installments)	1,000	
Other unpaid bills	500	
Long-term business debts	--	
Short-term business liabilities (inc. accounts payable)	--	
Loans against life insurance	2,000	
Other liabilities	--	
Total Liabilities	$28,500	

ASSIGNMENT SHEET #1

Assets	Example	Own Budget Entry
Personal assets (furniture, car, jewelry, etc)	5,000	______________
Other assets	--	______________
Total Assets	62,750	______________

BUDGETING

UNIT II

ASSIGNMENT SHEET #2: Worksheet for Family Spending

Col. 1

Line No.	Monthly	
1. FOOD		
2. Grocery store		
3. Milk (if delivered)		
5.		
6.		
7. Total		
8. HOUSE OPERATION		
9. Electricity		
10. Gas		
11. Heating fuel		
12. Telephone		
13. Water		
14. Household help		
15. Furniture and equipment		
16. Children's allowances		
17. Newspapers & magazines		
18. Dues & fees		
19. Payments on old bills		
20.		
21.		
22.		
23. Total		
24. CLOTHING		
25. Clothes for all family		
26. Cleaning & laundry		
27.		
28. Total		
29. CONTRIBUTIONS		
30. Churches		
31. Christmas gifts		
32. Non-family gifts		
33. Family gifts		
34. Charities		
35.		

Col. 2

Line No.	Monthly	
44. SHELTER		
45. Rent or mortgage		
46. Maintenance on home		
47. Property taxes		
48. Home insurance		
49.		
50.		
51. Total		
52. TRANSPORTATION		
53. Auto pyts. (or saving for new car)		
54. Bus, taxi or train		
55. Gas & oil for car		
56. Auto tires & repair		
57. Auto insurance		
58.		
59.		
60. Total		
61. PERSONAL		
62. Personal allowance		
63. Family entertainment		
64. Vacation fund		
65. Education		
66. Medicine & medical care		
67. All insurance (health, life, etc.)		
68. Dues and fees		
69. Income taxes not deducted		
70. Payments on old bills		
71.		
72.		
73. Total		
74. SAVINGS & INVESTMENTS		
75. Savings		
76. Regular investments		
77. Self-paid retirement plan		
78.		

ASSIGNMENT SHEET #2

	Col.1			Col.2	
Line No.	Monthly		Line No.	Monthly	
36. Total			79. Total		
37. SUMMARY			80. SUMMARY		
38. Food			81. Shelter		
39. House operation			82. Transportation		
40. Clothing			83. Personal		
41. Contributions			84. Savings and Investment		
42. Total monthly expense (col.1)			85. Total monthly expense (col.2)		
43. Other income			86. Total monthly expense (col.1 and 2)		

BUDGETING

UNIT II

ASSIGNMENT SHEET #3: Yearly Personal Budget

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total This Yr.	Total Last Yr.
Food														
House Operation														
Clothing														
Contributions														
Shelter														
Transportation														
Personal														
Savings & Investments														
TOTAL														

*Fill in the Yearly Budget with the information from Assignment Sheet #2.

BUDGETING

UNIT II

TEST

1. List six purposes of a personal budget.
   a.
   b.
   c.
   d.
   e.
   f.

2. Name six general rules of personal budgeting.
   a.
   b.
   c.
   d.
   e.
   f.

3. The two main parts of a personal budget are ______________________________

   and ______________________________.

4. List four factors that affect family living costs.
   a.
   b.
   c.
   d.

5. List the eight main expense items in a personal budget.
   a.
   b.

TEST

c.

d.

e.

f.

g.

h.

6. Complete a personal or family inventory. (Assignment Sheet #1)

7. Complete a monthly work sheet. (Assignment Sheet #2)

8. Complete a yearly personal budget. (Assignment Sheet #3)

BUDGETING

UNIT II

ANSWERS TO TEST

1. Any six of the eight purposes:
    a. A financial tool
    b. Involves planning
    c. An estimate of future receipts and disbursements
    d. A financial guide to spending
    e. May be developed for a family or individual
    f. May be revised to fit needs
    g. Includes income and expenditures
    h. A financial plan on a monthly basis

2. Six general rules for personal budgeting:
    a. Set goals
    b. Fixed items must be provided for first
    c. Large fixed items should be prorated
    d. Do not cut large expenses just because they are large
    e. Develop priorities
    f. Adequate records are important

3. Income and Expenditures

4. Four factors that affect family living costs:
    a. Stage of the family life cycle
    b. Living expenses rise with increased net income
    c. Larger family - larger expenses
    d. Increases in cost of living

ANSWERS TO TEST

5. Eight main expense items:
    a. Food
    b. Household operation
    c. Clothing
    d. Contributions
    e. Shelter
    f. Transportation
    g. Personal needs
    h. Savings and investments

6. Complete personal or family inventory sheet (Assignment Sheet #1) to the satisfaction of the instructor.

7. Complete monthly worksheet (Assignment Sheet #2) to the satisfaction of the instructor.

8. Complete yearly budget (Assignment Sheet #3) to the satisfaction of the instructor.

RECORD KEEPING

UNIT I

VALUE AND USE OF RECORDS

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to list benefits and uses of farm records, and select a good farm record keeping system. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. List eight external reasons for keeping records.
2. List three internal reasons for keeping records.
3. List eight features of the cash accounting method of keeping records.
4. List six features of the accrual accounting method of keeping records.
5. List ten uses of farm records.

RECORD KEEPING

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters
   - TM 1 - Bookkeeping Systems
   - TM 2 - Why Keep Records?
   - TM 3 - The Relationship of Farm Accounts (Records) to Farm Business Management
   - TM 4 - Value of Keeping Records
4. Test

INSTRUCTIONAL MATERIALS

5. Answers to Test

References:

1. Farm Records - A Management Tool, Ohio Agricultural Education Curriculum Materials Service, Ohio State University.
2. Farm Records - A Tool for Business Management, Cooperative Extension Service, Kansas State University, Manhattan.
3. Setting up Records to Provide for Analysis, VAS 2037, Vocational Agriculture Service, University of Illinois.
4. Farm Record Keeping with the Kansas Farm Account Book, Cooperative Extension Service, Kansas State University, Manhattan.
5. Record Keeping on the Farm, Vocational Agriculture Service, University of Illinois.
6. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agricultural Education Curriculum Materials Service, Ohio State University.

RECORD KEEPING

UNIT I

INFORMATION SHEET

I. External Reasons For Keeping Farm Records (TM 2)

   A. Correct and defensible income tax reporting. IRS income tax reports and audits are "painful" in proportion to the lack of adequate records.

   B. Tax management. Adequate and accurate records are needed to determine the tax due, and to avoid overpayments. Good records will also assist in planning year-end management techniques to level income and gain some larger tax savings.

   C. Self-employment social security taxes. Since these are paid on only certain farm income, a good set of records is necessary.

   D. Social security taxes on hired labor. This has become an important factor since many farmers will have employees that meet the minimum requirement.

   E. Good credit relations. As credit usage has increased, lenders are placing more emphasis on good records.

   F. Sound credit planning. Farmers need adequate records to plan future credit needs and to provide adequate protection for their business.

   G. Business continuity. Death, injury, disease or other causes can force a spouse or child to suddenly assume responsibility for a farm business. Details of credit, taxes, cost basis of real estate, etc., are all needed at this time.

   H. Landlord-tenant relationship. End-of-year settlements of shared costs and income require that adequate records were kept.

II. Internal Reasons For Keeping Farm Records (TM 2)

   A. Identify strong and weak parts of the business. Good records will help answer questions such as: Is the business too small? Which enterprise should I expand? Which should be eliminated? Are my costs under control? Is my production too low?

INFORMATION SHEET

B. Planning business changes. Budgeting, estimating income or expenses, planning changes in the farm business will be much more accurate if the individual farm data is used.

C. Operation and control of the business. The prior year's records can set standards to compare with this year's operation. If it is falling behind, corrective steps can be attempted.

III. Cash Accounting

A. On the cash basis, farm income includes all cash of value of merchandise or other property received during the year.

B. Farm expenses are deductible in the year they are actually paid.

C. It is simpler and easier to use.

D. In order to be able to make charges for depreciation of capital assets (machinery, buildings, and purchased breeding livestock) it is necessary to keep a depreciation schedule.

E. There are low tax payments in years of low cash receipts.

F. One year's income may include the sales of products raised in former years.

G. It is necessary to wait until purchased feeder livestock are sold before costs can be deducted.

H. Cash basis accounting provides for more flexibility in manipulating year end sales or cash expenses to reduce taxable income.

The cash accounting method does not include:

1. Does not take into consideration changes in farm inventories.
2. It does not include value of products sold or of services performed for which payment was not received during the year.
3. It is not necessary to take inventories of crops and livestock because income is based only on cash receipts and expenses; however, inventories are very essential for complete business analysis.
4. Sale of depreciable property is sometimes mistakenly reported as current farm income.

INFORMATION SHEET

5. Care must be exercised to be sure that accounts receivable are omitted from income calculations since only cash transactions are considered.

6. No changes in inventories are considered when figuring farm income.

IV. Accrual Accounting

A. The Kansas Farm Account Book utilizes the accrual method. The accrual method utilizes the complete inventory of assets, and changes in beginning and closing inventories are considered when determining farm income.

B. Farm income is included for the year in which it is earned regardless of when payment is received, while farm expenses are deductible in the taxable year in which incurred, whether paid or not.

C. These accounts must include a record of all sales (including sale of capital assets, cash income, operating expenses, a beginning and closing inventory of all livestock, hay, grain, and equipment on which depreciation allowances are to be claimed.

D. The accrual basis usually results in a more uniform pattern of income from year to year and over a period of years resulting in less taxes.

E. It provides a more stable basis for calculating taxable income because:

1. Net farm profit is limited to that portion of the gross income produced during the taxable years.

2. Increases in cash receipts are usually accompanied by decreases in physical inventories.

F. Cost of purchased livestock can be deducted the same year purchases are made.

G. In the event of dispersal sales of livestock and crops, the decrease in inventory will compensate for the resulting increase in gross receipts.

H. It may be that in a year of low cash receipts, high tax payments may result because of sharp increases in inventories.

INFORMATION SHEET

I. Accrual records can be used to report income for tax purposes on the cash basis

V. Uses of Farm Records

A. To furnish information necessary for tax reporting

1. Income
2. Social Security
3. Personal Property
4. Real Estate
5. Gasoline

B. To determine farm earnings

C. To observe financial progress

D. To determine which enterprises are most profitable

E. To determine weaknesses and strengths in the farm business as a whole and in specific enterprises

F. To furnish information to evaluate personal spending

G. To preserve information about the business for further references

H. To supply fee input and cost data for future planning

I. To supply necessary information for use when obtaining credit

J. To provide a basis for sound management decisions

K. To provide a basis for establishing an equitable farm lease

L. To provide actual value for property destroyed by fire

M. To check on the financial position of the family farm and to measure its financial progress from year to year

N. To aid in analyzing the performance of the farm business

O. To aid in filing income tax forms

P. To provide a basis for sound decision making

INFORMATION SHEET

Q. To help in making plans and budgets for future farming operations

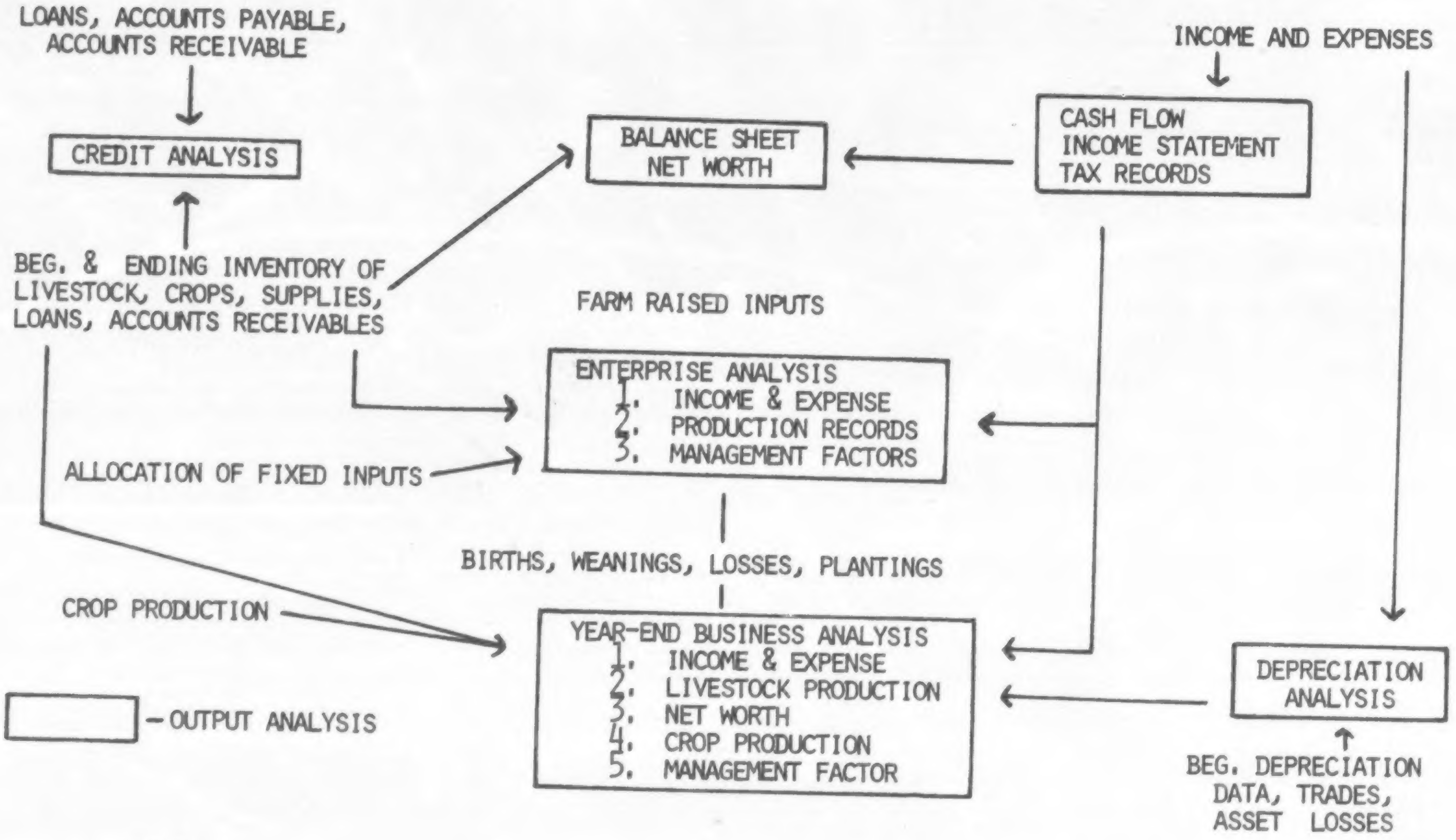
BOOKKEEPING SYSTEMS

"BANKER, YOU SAID BEFORE YOU'D LOAN ME ANY MORE MONEY I'D HAFTA BRING IN MY BOOKKEEPIN' SYSTEM. YOU JIST DON'T KNOW WHAT HECK I HAD TAKIN' THIS BARN DOOR OFF!"

WHY KEEP RECORDS?

1. External Reasons
   - A. CORRECT AND DEFENSIBLE INCOME TAX REPORTING
   - B. TAX MANAGEMENT
   - C. SELF-EMPLOYMENT SOCIAL SECURITY TAXES
   - D. HIRED LABOR TAXES
   - E. GOOD CREDIT RELATIONS
   - F. SOUND CREDIT PLANNING
   - G. BUSINESS CONTINUITY
   - H. LANDLORD-TENANT RELATIONS
2. Internal Reasons
   - A. IDENTIFY STRONG AND WEAK POINTS OF BUSINESS
   - B. PLANNING BUSINESS CHANGES
   - C. OPERATION AND CONTROL OF THE BUSINESS

THE RELATIONSHIP OF FARM ACCOUNTS (RECORDS) TO FARM BUSINESS MANAGEMENT



LOANS, ACCOUNTS PAYABLE, ACCOUNTS RECEIVABLE

CREDIT ANALYSIS

BEG. & ENDING INVENTORY OF LIVESTOCK, CROPS, SUPPLIES, LOANS, ACCOUNTS RECEIVABLES

BALANCE SHEET
NET WORTH

INCOME AND EXPENSES

CASH FLOW
INCOME STATEMENT
TAX RECORDS

FARM RAISED INPUTS

ENTERPRISE ANALYSIS
1. INCOME & EXPENSE
2. PRODUCTION RECORDS
3. MANAGEMENT FACTORS

ALLOCATION OF FIXED INPUTS

BIRTHS, WEANINGS, LOSSES, PLANTINGS

CROP PRODUCTION

YEAR-END BUSINESS ANALYSIS
1. INCOME & EXPENSE
2. LIVESTOCK PRODUCTION
3. NET WORTH
4. CROP PRODUCTION
5. MANAGEMENT FACTOR

DEPRECIATION ANALYSIS

BEG. DEPRECIATION DATA, TRADES, ASSET LOSSES

☐ - OUTPUT ANALYSIS

TM 3

SE UI-11

VALUE OF KEEPING RECORDS

GOOD RECORDS OF EXPENSES AND INCOME ARE IMPORTANT TO PRUDENT CURRENT SPENDING AND TO PLANNING FUTURE SPENDING.

GOOD
RECORD
KEEPING

...HELPS YOU SEE THE RELATIONSHIP BETWEEN INCOME AND EXPENDITURE.

...HELPS YOU LIVE WITHIN WHAT IS AN INADEQUATE INCOME.

...HELPS YOU SET PRIORITIES IN SPENDING (FIRST THINGS FIRST) —FIND THE LEAKS AND STOP THEM.

...HELPS YOU PLAN TO GET THE MOST OUT OF SPENDING, TO ELIMINATE HAPHAZARD BUYING, AND TO THINK OF ALTERNATIVES.

...HELPS CHILDREN ACQUIRE GOOD MONEY MANAGEMENT HABITS.

...HELPS YOU PREPARE INCOME TAX RETURNS AND CLAIM DEDUCTIONS.

...HELPS YOU ESTABLISH FAMILY'S NET WORTH.

...HELPS YOU PLAN HOW TO SPEND TIME AND ENERGY AS WELL AS MONEY.

...HELPS YOU DECIDE WHICH ITEMS ARE MOST ECONOMICAL TO BUY, WHAT TO MAKE, WHAT TO DO WITHOUT, AND WHAT TO PRODUCE AT HOME.

...HELPS FAMILY SEE WHAT IT CAN AFFORD TO BUY AND WHEN IT MAY BE PURCHASED.

...HELPS PREVENT CONFLICT AMOUNG FAMILY MEMBERS FOR THEIR SHARE OF THE FAMILY INCOME.

...REMINDS FAMILY MEMBERS OF THEIR ULTIMATE GOALS AND TEACHES THEM TO THINK OF MONEY IN TERMS OF THESE GOALS.

...SHOWS DATE OF PURCHASE OF IMPORTANT ITEMS.

...SHOWS PERCENTAGE OF INCOMES SPENT ON EACH CLASSIFICATION AND HELPS ALLOCATE EXPENDITURES WITH DUE REGARD TO THEIR RELATIVE IMPORTANCE.

...SHOWS PROGRESS TOWARD ATTAINING GOALS AND INDICATES WHETHER THESE GOALS ARE AS SATISFYING AS EXPECTED.

...SHOWS YOU WHERE DECREASES OR INCREASES IN EXPENDITURES MAY BE MADE WHEN INCOME CHANGES.

...HELPS YOU UNDERSTAND THE DURABILITY OF ARTICLES (HOW ONE TYPE GARMENT WEARS AS COMPARED TO ANOTHER.)

...SHOWS YOU WHEN AND HOW MUCH TO BUY—MONTHS OF SALES FOR VARIOUS ITEMS; ITEMS USED TO WARRANT PURCHASING IN LARGE QUANTITIES; TO SAVE MONEY, TIME AND THOUGHT; LESS FREQUENT PURCHASING AND ORDERING.

SOURCE: "PLANNING: KEEPING FAMILY ACCOUNTS," AGRICULTURAL EXTENSION SERVICE, SOUTH DAKOTA STATE COLLEGE, USDA.

RECORD KEEPING

UNIT I

TEST

1. List eight external reasons for keeping farm records.
2. List three internal reasons for keeping farm records.
3. List eight of the twelve features of the cash accounting method of keeping records.
4. List six of the eight features of the accrual accounting method of keeping records.
5. List ten uses of Farm Records.

RECORD KEEPING

UNIT I

ANSWERS TO TEST

1. a. Correct and defensible income tax reporting
   b. Tax management
   c. Self-employment social security taxes
   d. Social security taxes on hired labor
   e. Good credit relations
   f. Sound credit planning
   g. Business continuity
   h. Landlord-tenant relationship

2. a. Identify strong and weak parts of the business
   b. Planning business changes
   c. Operation and control of the business

3. Any eight of the following:
   a. On the cash basis, farm income includes all cash of value of merchandise or other property received during the year.
   b. This method does not take into consideration changes in farm inventories.
   c. It does not include value of products sold or of services performed for which payment was not received during the year.
   d. Farm expenses are deductible in the year they are actually paid.
   e. It is simpler and easier to use.

ANSWERS TO TEST

f. It is not necessary to take inventories of crops and livestock because income is based only on cash receipts and expenses; however, inventories are very essential for complete business analysis. In order to be able to make charges for depreciation of capital assets (machinery, buildings, and purchased breeding livestock) it is necessary to keep inventory accounts of these items whichever system of reporting is used.

g. There are low tax payments in years of low cash receipts.

h. One year's income may include the sales of products raised in former years.

i. Sale of depreciable property is sometimes mistakenly reported as current farm income.

j. It is necessary to wait until purchased feeder livestock are sold before costs can be deducted.

k. Care must be exercised to be sure that accounts receivable are omitted from income calculations since only cash transactions are considered.

l. No changes in inventories are considered when figuring farm income.

4. Any six of the following:

a. The Kansas Farm Account Book utilizes the accrual method. The accrual method utilizes the complete inventory of assets and changes in beginning and closing inventories are considered when determining farm income.

b. Farm income is included for the year in which it is earned regardless of when payment is received, while farm expenses are deductible in the taxable year in which incurred, whether paid or not.

c. These accounts must include a record of all sales (including sale of capital assets), cash income, operating expenses, a beginning and closing inventory of all livestock, hay, grain and equipment on which depreciation allowances are to be claimed.

d. The accrual basis usually results in a more uniform pattern of income from year to year and over a period of years resulting in less taxes.

ANSWERS TO TEST

e. It provides a more stable basis for calculating taxable income because:

   1. Net farm profit is limited to that portion of the gross income produced during the taxable years.

   2. Increases in cash receipts are usually accompanied by decreases in physical inventories.

f. Cost of purchases livestock can be deducted the same year purchases are made.

g. In the event of dispersal sales of livestock and crops, the decrease in inventory will compensate for the resulting increase in gross receipts.

h. It may be that in a year of low cash receipts, high tax payments may result because of sharp increases in inventories.

5. Any ten of the following:

   a. To furnish information necessary for tax reporting

      1) Income
      2) Social Security
      3) Personal Property
      4) Real Estate
      5) Gasoline

   b. To determine farm earnings
   c. To observe financial progress
   d. To determine which enterprises are the most profitable
   e. To determine weaknesses and strengths in the farm business as a whole and in specific enterprises
   f. To furnish information to evaluate personal spending
   g. To preserve information about the business for further references
   h. To supply fee input and cost data for future planning
   i. To supply necessary information for use when obtaining credit
   j. To provide a basis for sound management decisions

ANSWERS TO TEST

k. To provide a basis for establishing an equitable farm lease

l. To provide actual value for property destroyed by fire

m. To check on the financial position of the family farm and to measure its financial progress from year to year

n. To aid in analyzing the performance of the farm business

o. To aid in filing income tax forms

p. To provide a basis for sound decision making

q. To help in making plans and budgets for future farming operations

RECORD KEEPING

UNIT II

POSTING ENTRIES

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to make entries in the Kansas Farm Account Book. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Name the three phases of farm business record keeping.
2. List eight tips in keeping Farm Business records.
3. Determine where entries should be made in the Kansas Farm Account Book.

RECORD KEEPING

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and give to instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters
   - TM 1 - Business Records
   - TM 2 - Inflow - Outflow Pail
   - TM 3 - Kansas Farm Account Book Introduction
   - TM 4 - Kansas Farm Account Book
   - TM 5 - Receipts - A
   - TM 6 - Receipts - B

INSTRUCTIONAL MATERIALS

TM 7 - Receipts - C

TM 8 - Receipts - D

TM 9 - Expenses - A

TM 10 - Expenses - B

TM 11 - Expenses - C

TM 12 - Purchases

TM 13 - Inventory of Receivables

TM 14 - Inventory of Payables

TM 15 - Inventory of Livestock

TM 16 - Crops and Supplies

TM 17 - Owned Crop Production Worksheet

TM 18 - Owned Crop Production

TM 19 - Owned Crop Production

TM 20 - Gross Farm Income

TM 21 - Net Farm Income Computed on Accrual Basis

TM 22 - Balance Sheet - Net Worth Statement

TM 23 - Standards for Man Work Days

TM 24 - Farm Business Analysis

TM 25 - Farm Business Analysis

TM 26 - Livestock Income Summary

TM 27 - Supply and Disposal of Livestock, Roughages & Grains

4. Assignment Sheets

   #1 - Income and Expenses

   #2 - Cash Flow

   #3 - Owned and Rented Crop Production

5. Test

6. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. Farm Record Keeping with the Kansas Farm Account Book, Cooperative Extension Service, Kansas State University, Manhattan, KS.

RECORD KEEPING

UNIT II

INFORMATION SHEET

I. Phases of Farm Business Record Keeping

  A. Recording of receipts and expenses

  B. Keeping and using inventories

  C. Analyzing the farm business

II. Keeping Farm Business Records

  A. Develop the habit of keeping your account book up to date

  B. Enter cash transactions daily or weekly

  C. Enter checks as written or at least once a month

  D. Deposit all farm income in your bank account

  E. Identify all items on your deposit slip - especially borrowed money, gifts, or other receipts NOT subject to income tax

  F. Do most of your farm business by check

  G. Get your bank statement each month and check your account book with it

  H. In making entries of sales or purchases always write down:

    1. The date of the transaction
    2. The amount of the receipt or expense
    3. The name of the person or firm dealt with
    4. The kind of product sold or bought
    5. The number of units sold or bought
    6. The price of each unit

III. How the Farm Account Book is Organized

  A. Receipts and Expenses
    1. Classification and sample entries of receipts and expenses is proved on pages 2-2a and 3-3a
    2. There are 12 double pages for the year's receipts
    3. There are 18 double pages for the year's expenses
    4. Additional pages for receipts and expenses are available at your County Extension Office
    5. Total the receipts for each month and transfer the monthly totals to the Cash Inflow (Receipts Summary)

INFORMATION SHEET

6. Total the expenses for each month and transfer to the Cash Outflow

B. Inventories

1. Inventory of Receivables and Payables
    a. A list of your cash and non-cash assets and a list of your business liabilities (what you owe others) belongs on page 8. You need these totals to make up a financial or net worth statement at the end of each year.

    b. You can also keep a record on page 7 of accounts received new investments made, money borrowed, and payments made on notes, accounts, and mortgages during the year.

2. Inventory of livestock, crops, and supplies

    a. All livestock whether held for market or for breeding or dairy purposes should be included in this inventory for use in the farm business analysis on pages 15-18.

    b. Include all crops and supplies on hand at the beginning of the year (whether raised or purchased and whether held for sale or for use as feed, seed, etc.)

    c. Show the number or quantity, the unit price and total value for each livestock crop and supply item.

    d. The beginning of the year inventory is the end of the year inventory for the previous year. Beginning and ending inventory figures are necessary in order to determine the true income of a business.

C. Crop Production

1. Map of farm

2. Owned crop production worksheet and record

3. Rented crop production worksheet and record

D. Farm Business Analysis

1. Net income computed by the accrual method

    a. This method, using inventories, is the only way to get the full and true picture of the actual farm business for the year

INFORMATION SHEET

b. It includes a full year's production whether sold or not and also counts all the year's costs whether paid or not.

2. Balance sheet

   Note: A listing of your assets and liabilities at the end of each year will help you determine how much you are actually "getting ahead" from year to year.

3. Standards for man work units

   a. This is a way to measure both the size of your farm business and your labor efficiency.

   b. A reasonable standard for a year's work is 250 work days per man. If your present farm business represents less than 250 man work days per man on the farm your labor efficiency and net income could probably be increased by handling more acres; larger livestock units, or more intensive livestock feeding programs.

4. Farm business analysis, management factors

   a. This can be the most valuable page in your account book. Take time to do a little arithmetic here, then study these measures of your farm as a business:

      1) size - investment managed, gross income, acres, and total man work days

      2) labor- number of men and measure of output and efficiency

      3) machinery - investment and cost per crop acre

      4) crops - summary of production, value and income above direct production costs

      5) distribution of net income

         a) interest allowance for your own capital invested and managed

         b) value of unpaid family labor

         c) amount left for your own labor and management for the year

      6) profit guides - compare your year's production with these reasonable goals

INFORMATION SHEET

E. Livestock Breeding and Production Records

   1. Livestock breeding record

   2. Livestock production and mortality

   3. Use of these pages will provide you with useful information in managing the livestock aspect of your farm business

F. Tax Information

   1. Special tax information

   2. Record of farm wages paid

   3. Form 1099 information

   4. Cost of livestock sold

   5. Income tax estimate worksheet

G. Depreciation and Investment Records (In separate Depreciation and Investment book)

   1. Machinery and depreciation record

   2. Motorized equipment depreciation record

   3. Building depreciation record

   4. Breeding livestock depreciation record

   5. Owned real estate investment record

   6. Rented land record

   7. Tax information record

Business Records

A. AS AN INDICATOR OF BUSINESS SUCCESS.
  1. NET WORTHS - PRESENT, PAST, AND CHANGE OVER TIME.
  2. INCOMES - PRESENT, PAST, AND CHANGE OVER TIME.
  3. RETURNS - FOR LAND, LABOR, CAPITAL, AND MANAGEMENT.

B. AS A SERVICE TOOL.
  1. INCOME AND SOCIAL SECURITY TAX RETURNS.
  2. EMPLOYEE WAGE AND SOCIAL SECURITY REPORTS.
  3. BASIS FOR IMPROVED CREDIT RELATIONS.
  4. LANDLORD-TENANT AND PARTNERSHIP SETTLEMENT, RECORDS OF PAST SETTLEMENTS.
  5. ESTATE PLANNING.
  6. APPRAISAL OF LAND VALUES.
  7. BASIS FOR FORWARD FARM PLANNING.

C. AS A FARM BUSINESS ANALYSIS TOOL.
  1. SOURCES OF FARM INCOME
  2. SOURCES OF FARM PROFITS AND LOSSES.
  3. WEAK AND STRONG PARTS OF THE BUSINESS.
  4. FACTS FOR IMPORTANT DECISIONS.

Inflow - Outflow Pail

Cash receipts
Loans
Off-farm labor

Cash operating expenses
Taxes, Insurance
Debt repayment
Capital purchases
Family living

Kansas Farm Account Book Introduction

YOUR KANSAS FARM ACCOUNT BOOK WILL NOT CURE A SICK FARM BUSINESS, BUT IT SHOULD HELP YOU DIAGNOSE ITS BUSINESS WEAKNESSES, AND POINT THE WAY TO IMPROVED MANAGEMENT AND HIGHER INCOME.

SE U2-12

Kansas Farm Account Book

COOPERATIVE EXTENSION SERVICE
KANSAS STATE UNIVERSITY, MANHATTAN

Receipts - A

MONTH____________________, 19____

Line No.	Date	Check Number	Amount Received		Details of Transaction					
					From Whom Received	Item	No. Units	Total Weight	Price	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30	XXX	XXXXX			Total each month and transfer to Page 6		XXXXX	XXXXX	XXXX	XX
			A		Col. A should equal Col.1 - 24				Column Number	

SE U2-14

Receipts - B

Market Livestock Receipts						Livestock Product Receipts								Line No.
Cattle		Sheep		Swine		Poultry		Dairy Products		Eggs		Wool & Hides		
														1
														2
														3
														4
														5
														6
														7
														8
														9
														10
														11
														12
														13
														14
														15
														16
														17
														18
														19
														20
														21
														22
														23
														24
														25
														26
														27
														28
														29
														30
1		2		3		4		5		6		7		

Receipts - C

MONTH__________________. 19____

LINE NO.	CROP SALES						OTHER FARM INCOME			
	WHEAT	CORN	GRAIN SORGHUM	OATS, RYE & BARLEY	ALL ROUGHAGES	SOYBEANS, SUG. BEETS, FRUIT, ETC.	CUSTOM MACHINE WORK	PATRONAGE DIVIDENDS	AGRICUL. PROGRAM PAYMENTS	GAS & OTHER REFUNDS, MISC.
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
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22										
23										
24										
25										
26										
27										
28										
29										
30										
	8	9	10	11	12	13	14	15	16	17

Receipts - D

SE U2-16

Scheduled Income	Loans & Non-Taxable Receipts			Outside Business Income			Line No.
Mach. Bldg. Sales & Breeding Lvst. Sales	Current Loans	Intermed. & Long Term Loans	Non. Taxable Receipts	Rent & Royalty	Interest & Dividends	Other	
							1
							2
							3
							4
							5
							6
							7
							8
							9
							10
							11
							12
							13
							14
							15
							16
							17
							18
							19
							20
							21
							22
							23
							24
							25
							26
							27
							28
							29
							30
18	19	20	21	22	23	24	

Total Out. Bus. Col.22 thru 24

B

TM 8

SE U2-17

Expenses - A

MONTH______ _________, 19_____

Line No.	Date	Check Number	Amount Paid		Details of Transaction					
					From Whom Purchased	Item	No. Units	Total Weight	Price	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
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16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30	XX	XXXXX			Total each month and transfer to Page 6a		XXXX	XXXX	XXXX	XX
			A		Col.A should equal Col. 1 thru 25				Column Number	

Expenses - B

SE 02-18

	REPAIRS					CROP EXPENSES		
LABOR HIRED	EQUIP & MACHINERY REPAIRS	BUILDING & FARM IMPR. REPAIRS & INSURANCE	INTEREST	CASH RENT	FEED PURCHASED	SEED, CROP INSURANCE & OTHER CROP EXP.	HERBICIDES & INSECTICIDES	Line No.
								1
								2
								3
								4
								5
								6
								7
								8
								9
								10
								11
								12
								13
								14
								15
								16
								17
								18
								19
								20
								21
								22
								23
								24
								25
								26
								27
								28
								29
								30
1	2	3	4	5	6	7	8	

Expenses - C

MONTH____________________ 19____

LINE NO.	CROP EXPENSES. CONT.		LIVESTOCK EXPENSES		OTHER OPERATING EXPENSE					
	FERTILIZER & LIME	MACHINE HIRE, STORAGE	LVST. MKTG., BREEDING, INS. & OTHER LVST. EXP.	VETERINARY, MEDICINE & DRUGS	GAS, FUEL & OIL	REAL & PER. TAXES & GEN. INS.	UTILITIES (ALL)	CONSERVATION & LAND CLEARING	AUTO EXPENSES (ALL)	FARM ORG. FEES, PUBLI-CATIONS ETC
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
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26										
27										
28										
29										
30										
	9	10	11	12	13	14	15	16	17	18

Purchases

	Capital Purchases		Non-Deductible			Outside Business	
Feeder Livestock For Resale	Dairy & Breeding Livestock	Machinery, Equipment, Buildings & Improv'nts	Current Principal	Intermediate & Long Term Principal	Income Tax, Self Emp. Tax. Other Non-Ded.	Outside Business Expenses	Line No.
							1
							2
							3
							4
							5
							6
							7
							8
							9
							10
							11
							12
							13
							14
							15
							16
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							21
							22
							23
							24
							25
							26
							27
							28
							29
							30
19	20	21	22	23	24	25	

Inventory of Receivables

YEAR 19____

Line No.	Owed to You at Year End			
		Description	Amount	
1		Checking Account		
2		Checking Account		
3		Savings Account		
4		Salable Stocks & Bonds		
5		TOTAL CASH (Add lines 1 through 4) $		
6	CURRENT	Farm Business Accounts Owed to Me		
7		Farm Business Notes Owed to Me		
8				
9				
10				
11		TOTAL CURRENT (Add lines 6-10) $		
12	INTERMEDIATE	PCA Stock		
13		PCA Stock		
14		Coop Stock		
15		Coop Stock		
16				
17				
18				
19				
20				
21		TOTAL INTERMEDIATE (Add lines 12-20) $		
22	LONG TERM	FLB Stock		
23		FLB Stock		
24				
25				
26				
27		TOTAL LONG TERM (Add lines 22-26) $		
28	NON FARM			
29				
30				
31				
32		TOTAL NON FARM (Add lines 28-31) $		

Inventory of Payables

Line No.	Owed By You At End Year				Line No.
		Description	Amount		
33	CURRENT	Outstanding Checks (and Bank Overdraft)			33
34		Taxes Due But Unpaid			34
35		Rent Due But Unpaid			35
36		Interest Due But Unpaid			36
37		Farm Business Operating Loans			37
38					38
39					39
40					40
41					41
42		Farm Business Accounts			42
43					43
44					44
45					45
46		TOTAL CURRENT (Add lines 33-45) $			46
47	INTERMEDIATE	Intermediate Loans (One to Seven Years)			47
48					48
49					49
50					50
51					51
52					52
53		TOTAL INTERMEDIATE (Add lines 47-52) $			53
54	LONG TERM	Long Term Loans (Over Seven Years)			54
55					55
56					56
57					57
58					58
59		TOTAL LONG TERM (Add lines 54-58) $			59
60	NON FARM				60
61					61
62					62
63					63
64		TOTAL NON FARM (Add lines 60-63) $			64

Inventory of Livestock

YEAR 19____

Line No.	Livestock Description	No.of Head	Price Per Head	Ave. Wt./Hd.	Total Value (Col. 1)	
1	CATTLE-Beef Cows or Heifers					
2	Beef Cows or Heifers					
3	Beef Cows or Heifers					
4	Beef Young Heifers					
5	Beef Bulls					
6	Beef Bulls					
7	Beef Feeders or Calves					
8	Beef Feeders or Calves					
9	Beef Feeders or Calves					
10	Beef Feeders or Calves					
11	Dairy Cows or Heifers					
12	Dairy Cows or Heifers					
13	Dairy Cows or Heifers					
14	Dairy Young Heifers					
15	Dairy Bulls					
16	Dairy Bulls					
17	TOTAL CATTLE (Add lines 1-16)		XXXXX XX	XXXXX		
18	SWINE-Swine Sows or Gilts					
19	Swine Sows or Gilts					
20	Swine Sows or Gilts					
21	Swine Boars					
22	Swine Boars					
23	Swine Feeders or Pigs					
24	Swine Feeders or Pigs					
25	Swine Feeders or Pigs					
26	Swine Feeders or Pigs					
27	TOTAL SWINE (Add lines 18-26)		XXXXX XX	XXXXX		
28	SHEEP-Sheep Ewes					
29	Sheep Rams					
30	Sheep Lambs					
31	Horses					
32	Other Livestock					
33	Poultry					
34	TOTAL ALL LIVESTOCK (Add lines 17, 27 and 28 to 33)				$	

SE U2-24

Crops and Supplies

CROP DESCRIPTION	No. Units (Bu. Tns.)	Price Per Unit		Total Value* (Col.2)		
Wheat-Open Storage	bu.	bu.				35
Wheat-Loan as Loan**	bu.	bu.				36
Corn-Open Storage	bu.	bu.				37
Corn-Loan as Loan**	bu.	bu.				38
Grain Sorghum-Storage	bu.	bu.				39
Grain Sorghum-Loan**	bu.	bu.				40
Soybeans-Open Storage	bu.	bu.				41
Soybeans-Loan**	bu.	bu.				42
Barley	bu.	bu.				43
Oats	bu.	bu.				44
Rye	bu.	bu.				45
Other Grains	bu.	bu.				46
Corn Silage	tns.	tns.				47
Sorghum-Other Silage	tns.	tns.				48
Alfalfa Hay	tns.	tns.				49
Brome-Fescue Hay	tns.	tns.				50
Prairie Hay	tns.	tns.				51
Other Hay	tns.	tns.				52
Straw	tns.	tns.				53
FEED-SUPPLIES-OTHER				VALUE		54
Salt-Additives	XXXXXX XX XX	XXXXXXX	XX			55
Protein	XXXXXX XX XX	XXXXXXX	XX			56
Seeds-Plants	XXXXXX XX XX	XXXXXXX	XX			57
Fertilizer-Lime	XXXXXX XX XX	XXXXXXX	XX			58
Herbicides	XXXXXX XX XX	XXXXXXX	XX			59
Gas-Fuel-Oil	XXXXXX XX XX	XXXXXXX	XX			60
Mixed Feed	XXXXXX XX XX	XXXXXXX	XX			61
TOTAL CROP-FEED SUPPLY (Add lines 35-61)						62
OWNED LAND, END OF YEAR (Excluding Home)				VALUE		63
Owned Land						64

**Grain covered by government loans and treated as income should not be inventoried.
Grain covered by government loans and treated as loans should be inventoried. The loans should also be reported as current payables.

Owned Crop Production Worksheet

FARM No.____________________

Line No.	CROP	FIELD ID.	ACRES	YIELD	FERTILIZER					Line No.
					TOTAL PROD.	POUNDS	N	P	K	
1										1
2										2
3										3
4										4
5										5
6										6
7										7
8										8
9										9
10										10
11										11
12										12
13										13
14										14
15										15
16										16
17										17
18										18
19										19
20										20
21										21
22										22
23										23
24										24
25										25
26										26
27										27
28										28
29										29
30										30
31										31
32										32

SE U2-26

Owned Crop Production

YEAR 19_____

LINE	DESCRIPTION	ACRES	YIELD PER ACRE	TOTAL PRODUCTION	PRICE PER UNIT		TOTAL VALUE	
	TILLABLE — DRYLAND CROPS							
1	Wheat							
2	Corn							
3	Grain Sorghum							
4	Soybeans							
5	Barley							
6	Rye							
7	Oats							
8	Sugar Beets							
9	Dry Beans							
10	Other Cash Crops							
11	Alfalfa Hay							
12	Brome—Fescue Hay							
13	Other Hay							
14	Corn Silage							
15	Sorghum—Other Silage							
16	Grass—Legume Seed							
17	Temporary Pasture		XXXX	XXXXXXX				
18	Idle—Fallow		XXXX	XXXXXXX	XXXXX	XX	XXXXXXX	XX
19	Diverted Acres		XXXX	XXXXXXX	XXXXX	XX	XXXXXXX	XX
20	Total Dry Crop Acres (Add Lines 1-19)		Total Dry Crop Value (Add Lines 1-19)					
21	PASTURE AND MEADOW							
22	Native Pasture		XXXX	XXXXXXX				
23	Brome—Fescue Pasture		XXXX	XXXXXXX				
24	Prairie Meadow							
25	Total Pasture Acres (Add Lines 22-24)		Total Pasture Value (Add Lines 22-24)					
26	DRYLAND DOUBLE CROP							
27	Soybeans							
28	Grain Sorghum							
29	Sudan							
30	Straw							
31	Residue Pasture		XXXX	XXXXXXX				
32	Other Roughage							
33	Total Dryland Double Crop Value (Add Lines 27-32) →							
34	Total Dryland Crop & Pasture Value (Add Lines 20, 25 & 33) →							

Owned Crop Production

LINE	DESCRIPTION	ACRES	YIELD PER ACRE	TOTAL PRODUCTION	PRICE PER UNIT		TOTAL VALUE	
	TILLABLE — IRRIGATED ACRES							
35	Wheat							
36	Corn							
37	Grain Sorghum							
38	Soybeans							
39	Other Grains							
40	Sugar Beets							
41	Dry Beans							
42	Other Cash Crops							
43	Alfalfa Hay							
44	Brome—Fescue Hay							
45	Other Hay							
46	Corn Silage							
47	Sorghum—Other Silage							
48	Temporary Pasture							
49	Idle—Fallow		XXXX	XXXXXXX	XXXXX	XX	XXXXXXX	XX
50	Diverted Acres		XXXX	XXXXXXX	XXXXX	XX	XXXXXXX	XX
51	Total Irrigated Crop Acres (Add Lines 35-50)		Total Irrigated Crop Value (Add Lines 35-50)					
52	OTHER ACRES AND CROP PAYMENTS							
53	Dryland Govt Payment	XXX	XXXX	XXXXXXX	XXXXX	XX		
54	Irrigated Govt Payment	XXX	XXXX	XXXXXXX	XXXXX	XX		
55	Timber							
56	Farmstead & Waste		XXXX	XXXXXXX	XXXXX	XX	XXXXXXX	XX
57	Insurance Proceeds (Crops)	XXX	XXXX	XXXXXXX	XXXXX	XX		
58	Total Other Acres (Add Lines 53-57)		Total Payments (Add Lines 53-57)					
59	IRRIGATED DOUBLE CROP							
60	Soybeans							
61	Grain Sorghum							
62	Sudan							
63	Straw							
64	Residue Pasture							
65	Other Roughage							
66	Total Irrigated Double Crop Value (Add Lines 60-65) →							
67	Total Irrigated Crop & Other Crop Payment Value (Add Lines 51, 58 & 66) →							
68	Total Owned Acres (Add Lines 20, 25, 51 & 58)		Total Owned Crop Prod. Value (Line 34 + L. 67)					
69	Non-Cropland Production Total Value (L. 25 & L. 55)							
70	Value of All Cropland Production (L. 68 Minus L. 69)							

Gross Farm Income

LINE	ENDING INVENTORY & CASH FARM RECEIPTS			
1	Total Livestock Ending Inventory	(P. 9, L. 34, Col. 1, End of Yr.)		
2	Total Crop, Feed, Supply Ending Inventory	(P. 9, L. 62, Col. 2, End of Yr.)		
3	Cash Farm Receipts	(P. 6, Line A, Total Year Col.)		
4	Total End. Inv. & Cash Farm Recpts.	(Add Lines 1 through 3)		
5	BEGINNING INVENTORY & LIVESTOCK PURCHASES			
6	Total Livestock Beginning Inventory*	(P. 9, L. 34, Col. 1, Beg. of Yr.)		
7	Total Crop, Feed, Supply Begin. Inv.*	(P. 9, L. 62, Col 2., Beg. of Yr.)		
8	Feeder Livestock Purchases for Resale	(P. 6a, L. 19, Tot. Yr. Col.)		
9	Dairy & Breeding Livestock Purchases	(P. 6a, L. 20, Tot. Yr. Col.)		
10	Total Beg. Inv. & Livest. Purch.	(Add Lines 6 through 9)		
11	GROSS FARM INCOME	(L. 4 minus L. 10)		
12	NOTES			
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

* The beginning Inventory of the present year is the same as the ending inventory of the previous year.

Net Farm Income Computed on Accrual Basis

NET FARM INCOME										
LINE	EXPENSES		(A) TOTAL FARM		(B) CROP SHARE			(C) LIVESTOCK SHARE		
					%*	AMOUNT		%*	AMOUNT	
25	Labor Hired	(From P. 6a, Tot. Yr. Col., L. 1)								
26	Equipment & Mach. Repairs	(From P. 6a, Tot. Yr. Col., L. 2)								
27	Building Repairs	(From P. 6a, Tot. Yr. Col., L. 3)								
28	Interest	(From P. 6a, Tot. Yr. Col., L. 4)								
29	Cash Rent	(From P. 6a, Tot. Yr. Col., L. 5)								
30	Feed Purchased	(From P. 6a, Tot. Yr. Col., L. 6)			XX	XXXXX	XX	100		
31	Seed, Crop Insurance	(From P. 6a, Tot. Yr. Col., L. 7)			100			XX	XXXXX	XX
32	Herbicides & Insecticides	(From P. 6a, Tot. Yr. Col., L. 8)								
33	Fertilizers & Lime	(From P. 6a, Tot. Yr. Col., L. 9)			100			XX	XXXXX	XX
34	Mach. Hire, Storage	(From P. 6a, Tot. Yr. Col., L. 10)								
35	Lvst. Mktg., Breeding & Ins.	(From P. 6a, Tot. Yr. Col., L. 11)			XX	XXXXX	XX	100		
36	Vet., Medicine & Drugs	(From P. 6a, Tot. Yr. Col., L. 12)			XX	XXXXX	XX	100		
37	Gas, Fuel & Oil	(From P. 6a, Tot. Yr. Col., L. 13)								
38	Real & Per. Taxes, Gen. Ins.	(From P. 6a, Tot. Yr. Col., L. 14)								
39	Utilities (Farm Share Only)	(From P. 6a, Tot. Yr. Col., L. 15) Tot. $________ X %Farm Share ____								
40	Conservation & Land Clearing	(From P. 6a, Tot. Yr. Col., L. 16)			100			XX	XXXXX	XX
41	Auto Expenses (Farm Share Only)	(From P. 6a, Tot. Yr. Col., L. 17) Tot. $________ X %Farm Share ____								
42	Farm Org. Fees, Pub., etc.	(From P. 6a, Tot. Yr. Col., L. 18)								
43	Machinery Deprec.	(From Depreciation Record)								
44	Motorized Equipment Deprec.	(From Depreciation Record)								
45	Building Depreciation	(From Depreciation Record)								
46	Breeding Livestock Deprec.	(From Depreciation Record)			XX	XXXXX	XX	100		
47	Total Farm Business Expenses	(Add Lines 25 through 46)			XX			XX		
48	NET FARM INCOME	(L. 11 Minus L. 47)			XX	XXXXX	XX	XX	XXXXX	XX

* Percent of total farm expenses that should be charged to crops & livestock production. Use best judgment in prorating crops and livestock expenses.

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Balance Sheet - Net Worth Statement

LINE	FARM ASSETS		END OF YEAR	
1	CURRENT FARM ASSETS		XXXXXXXX	X
2	Cash on Hand (Not in Bank)			
3	Total Cash Receivables	(P. 8. L. 5)		
4	Total Current Receivables	(P. 8. L. 11)		
5	Total Livestock Inventory Value	(P. 9. L. 34. Col. 1)		
6	Total Crop. Feed & Supplies Inventory Value	(P. 9. L. 62. Col. 2)		
7	Other Current Farm Assets (if any)			
8	TOTAL CURRENT FARM ASSETS	(Add Lines 2 through 7)		
9	INTERMEDIATE FARM ASSETS		XXXXXXXX	X
10	Total Intermediate Receivables	(P. 8. L. 21)		
11	Total Machinery Value	(From Mach. Deprec. Record)		
12	Total Motorized Equipment Value	(From Motor Equip. Deprec. Record)		
13	Other Intermediate Farm Assets (if any)			
14	TOTAL INTERMEDIATE FARM ASSETS	(Add Lines 10 through 13)		
15	FIXED FARM ASSETS		XXXXXXXX	X
16	Total Long Term Receivables	(P. 8. L. 27)		
17	Farm Land Value	(P. 9. L. 64. Col. 2)		
18	Farm Buildings Value	(From Bldg. Deprec. Record)		
19	Other Long Term Farm Assets (if any)			
20	TOTAL FIXED FARM ASSETS	(Add Lines 16 through 19)		
21	TOTAL FARM ASSETS	(Add Lines 8. 14 & 20)		
22	FARM LIABILITIES		XXXXXXXX	X
23	TOTAL CURRENT FARM LIABILITIES	(P. 8. L. 46)		
24	TOTAL INTERMEDIATE FARM LIABILITIES	(P. 8. L. 53)		
25	TOTAL LONG TERM FARM LIABILITIES	(P. 8. L. 59)		
26	TOTAL FARM LIABILITIES	(Add Lines 23 through 25)		
27	FARM NET WORTH	(Line 21 minus Line 26)		
28			XXXXXXXX	X
29	NON-FARM ASSETS AND LIABILITIES		XXXXXXXX	X
30	Non-Farm Receivables	(P. 8. L. 32)		
31	Other Non-Farm Assets (if any)	(Include home, if owned and not included above)		
32	TOTAL NON-FARM ASSETS	(Add Lines 30 & 31)		
33	Non-Farm Payables	(P. 8. L. 64)		
34	Other Non-Farm Liabilities (if any)			
35	TOTAL NON-FARM LIABILITIES	(Add Lines 33 & 34)		
36	NON-FARM NET WORTH	(Line 32 minus Line 35)		
37	TOTAL FARM AND NON-FARM NET WORTH	(Add Lines 27 & 36)		
38			XXXXXXXX	X
39	TOTAL FARM AND NON FARM NET WORTH LAST YEAR	(From Last Year's Record)		
40	INCREASE (DECREASE) IN NET WORTH	(Line 37 minus Line 39)		

Standards for Man Work Days

LINE							
41	To obtain the Man Work Days represented for crops in your farm business, multiply the number of acres of crops by the standards shown (Man Work Days = No. of Acres × Standards). For full year livestock enterprises, multiply the number of head by the standard (Man Work Days = No. of Head × Standard). For cattle feeding enterprises, multiply the number of head times the numberof months times the standard (Man Work Days = No. of Head × Months × Standard).						
42							
43							
44							
45							
46	CROP	ACRES	MAN WORK STANDARDS				MAN WORK DAYS
			EAST	CENTRAL	WEST	IRRIG.	
47	Wheat, Barley, Rye		.24	.18	.10	.25	
48	Oats		.22	.15	.10	.25	
49	Corn		.37	.28	.18	.34	
50	Grain Sorghum		.25	.23	.16	.30	
51	Soybeans		.28	.22	.15	.30	
52	Sugar Beets		—	--	—	.50	
53	Other Cash Crops		—	—	—	.29	
54	Alfalfa		.90	.66	.28	.43	
55	Brome, Bermuda, Prairie		.32	.22	.17	.30	
56	Silage		.60	.54	.47	.52	
57	Temporary Pasture		.18	.12	.09	.16	
58	Summer Fallow		—	.025	.025	—	
59	TOTAL CROP MAN WORK DAYS (Add L. 47-58)	XXXXX	XXX	XXX	XXX	XXX	
60	LIVESTOCK	NO. OF HEAD	NO. OF MONTHS		STANDARD		
61	Beef Cows		XXXXXXX		.8		
62	Dairy Cows		XXXXXXX		6.0		
63	Swine—Litters (farrowing—weaning)		XXXXXXX		.9		
64	Feeder Pigs Raised		XXXXXXX		.05		
65	Feeder Pigs Purchased		XXXXXXX		.05		
66	Ewes		XXXXXXX		.4		
67	Feeder Lambs Purchased		XXXXXXX		.075		
68	Laying Hens/1000		XXXXXXX		20.0		
69	Cattle Feeding—Days per Head per Month	XXXXX	XXXXXXXX		XXXXX		XXXXX
70	Grazing				.15		
71	Backgrounding				.70		
72	Finishing				.70		
73	Custom Finishing				.10		
74							
75							
76							
77							
78							
79	TOTAL LIVESTOCK MAN WORK DAYS (Add L. 61-78)	XXXXX	XXXXXXX		XXXXXXX		
80	TOTAL FARM MAN WORK DAYS (Add L. 59 & 79)	XXXXX	XXXXXXX		XXXXXXX		

Farm Business Analysis

	MANAGEMENT FACTORS				
LINE	SIZE				XXXXX
1	Total Farm Assets	(P. 16, L. 21)			
2	Value of Land and Bldgs. Rented	(Estimate)			
3	Total Capital Managed	(Add Lines 1 & 2)			
4	Gross Farm Income	(P. 15, L. 11)			
5	Total Acres Operated	(Owned______Rented______)			
6	Acres in Cropland	(Owned______Rented______)			
7	Total Farm Man Work Units	(See Standards P. 16, L. 80)			
8					
9	LABOR				XXXXX
10	Months of Operator's Labor				XXXXX
11	Months of Hired Labor				XXXXX
12	Months of Unpaid Family Labor	(Man Equiv. Basis)			XXXXX
13	No. of Men (Total months, add Lines 10 through 12)	(____ ÷ 12 = No. of Men)		XXXXX	
14					
15	PER MAN EFFICIENCIES				
16	Capital Managed Per Man	(Line 3 ÷ Line 13)			
17	Gross Income Per Man	(Line 4 ÷ Line 13)			
18	Total Acres Per Man	(Line 5 ÷ Line 13)			
19	Crop Acres Per Man	(Line 6 ÷ Line 13)			
20	Man Work Days Per Man	(Line 7 ÷ Line 13)			
21					
22	MACHINERY		(A) TOTAL	(B) CROP SHARE	(C) LVST. SHARE
23	Machinery Investment Value	(P. 16, L. 11)			
24	Motorized Equip. Invest. Value	(P. 16, L. 12)			
25	Total Mach. & Motorized Equip. Invest.	(Add Lines 23 & 24)			
26	Machinery Investment Per Crop Acre	(Line 25, Col. B ÷ Line 6)	XXXXX		XXXXX
27	Total Cash Exp. on Mach.	(P. 15, Add. L. 26, 34, 37 & 41)			
28	Mach. & Motorized Equip. Deprec.	(P. 15, Add Lines 43 & 44)			
29	Interest on Machinery Investment	(L. 25 × 6%)			
30	Total Machinery Cost	(Add Lines 27 through 29)			
31	Receipts—Machine Work	(P. 6, L. 14, Tot. Yr. Col.)			
32	Net Machinery Cost	(Line 30 Minus Line 31)			
33	Machinery Cost Per Crop Acre	(Line 32, Col. B ÷ Line 6)	XXXXX		XXXXX
34					
35					
36					
37					

Farm Business Analysis

	MANAGEMENT FACTORS			
LINE	CROPS		FARM	PER ACRE
38	Value of All Cropland Production	(P. 12 & 14, L. 70, Total Value Col.)		XXXXX
39	Value of Rent Share of All Cropland Prod.	(P. 14, L. 70, Landlord's Share Col.)		XXXXX
40	Value of My Share of Crops	(Line 38 minus Line 39)		XXXXX
41	Crop Expenses	(P. 15, L. 47, Col. B)		XXXXX
42	Receipts—Machine Work, Crop Share	(Line 31, Col. B)		XXXXX
43	Adjusted Crop Expenses	(Line 41 minus Line 42)		XXXXX
44	Value of Raised Seed Planted	(Estimate)		XXXXX
45	Direct Crop Cost*	(Add Lines 43 & 44)		XXXXX
46	Crop Income Over Direct Crop Costs	(Line 40 minus Line 45)		XXXXX
47	Value of All Cropland Prod. Per Crop Acre	(Line 38 ÷ Line 6)	XXXXX	
48	Val. of My Share of All Cropland Prod. Per Crop A.	(Line 40 ÷ Line 6)	XXXXX	
49	Direct Crop Cost Per Crop Acre*	(Line 45 ÷ Line 6)	XXXXX	
50	Crop Income Over Direct Cost Per Crop Acre	(Line 48 minus Line 43)	XXXXX	
51				
52	OPERATOR'S RETURN FOR LABOR & MANAGEMENT			
53	Net Farm Income	(P. 15, L. 48)		XXXXX
54	Net Capital (Net Farm Worth)	(P. 16, L. 27)		XXXXX
55	Interest on Net Capital	(Line 54 × 6%)		XXXXX
56	Value Unpaid Family Labor	(Months______ × $______ Per Month)		XXXXX
57	Total Interest and Unpaid Family Labor	(Add Lines 55 & 56)		XXXXX
58	Operator's Return for Labor & Management	(L. 53 minus L. 57)		XXXXX
59				
60	PROFIT GUIDES		MY FARM	REASONABLE GOALS
61	Raised Beef Stocker Calves—Ave. Weaning Wgt.			475 lbs.
62	Percent Calf Crop	(No. Calves Raised ÷ No. Cows × 100)		92%.
63	Ave. No. Pigs Weaned Per Litter	(No. Pigs Weaned ÷ No. Lit.)		8.5
64	Percent Lamb Crop	(No. Lambs Raised ÷ No. Ewes × 100)		120%
65	Value Milk Sold Per Cow	(P. 6, L. 5, Tot. Yr. Col. ÷ Ave. No. Cows)		
66	Pounds Milk Produced Per Cow	(Tot. lbs. Milk ÷ Ave. No. Cows)		14,500 lbs.
67	Egg Sales Per Hen	(P. 6, L. 6, Tot. Yr. Col. ÷ Ave. No. Hens)		
68	Gross Farm Income	(Line 4)		
69	Gross Farm Income Per Man	(Line 17)		
70	Net Farm Income	(Line 53)		
71	Man Work Days Per Man	(Line 20)		300
72	Total Farm Business Expenses	(P. 15, Line 47, Total Farm Col.)		
73	Total Farm Expenses Per $1 Gross Income	(Line 72 ÷ Line 68)		Under 73¢
74	Ratio of Gross Income to Net Income	(Line 68 ÷ Line 70)		4 (4 to 1)

*This cost figure does not include the following: (a) an interest charge on the operator's own capital, (b) a charge on operator and unpaid family labor and management and (c) a land charge on owned land.

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Livestock Income Summary

1	CATTLE—Cattle Sales	(P. 6, L. 1, Tot. Yr. Col.)			XXXXX	XX
2	Cattle Product Receipts	(Cattle Items P. 6, Lines 5 & 7)			XXXXX	XX
3	Ending Inventory of Cattle	(P. 9, L. 17, Col. 1)			XXXXX	XX
4	Total Receipts & End. Inventory	(Add Lines 1 through 3)	XXXXX	XX		
5	Beef Feeders Purchased	(Cattle Items P. 6a, L. 19, Tot. Yr. Col.)			XXXXX	XX
6	Dairy & Breeding Cattle Purchased	(Cattle Items P. 6a, L. 20, Tot. Yr. Col.)			XXXXX	XX
7	*Beginning Inventory of Cattle	(P. 9, L. 17, Col. 1 of Previous Year)			XXXXX	XX
8	Total Purchases & Beg. Inventory	(Add Lines 5 through 7)	XXXXX	XX		
9	GROSS INCOME FROM CATTLE	(Line 4 minus Line 8)	XXXXX	XX		
10	SHEEP—Sheep Sales	(P. 6, L. 2, Tot. Yr. Col.)			XXXXX	XX
11	Wool Receipts	(Wool Items P. 6, Line 7)			XXXXX	XX
12	Ending Inventory of Sheep	(P. 9, L. 28 & 29 & 30, Col. 1)			XXXXX	XX
13	Total Receipts & End. Inventory	(Add Lines 10 through 12)	XXXXX	XX		
14	Sheep Feeders Purchased	(Sheep Items P. 6a, L. 19, Tot. Yr. Col.)			XXXXX	XX
15	Breeding Sheep Purchased	(Sheep Items P. 6a, L. 20, Tot. Yr. Col.)			XXXXX	XX
16	*Beginning Inventory of Sheep	(P. 9, L. 28 & 29 & 30, Col. 1 of Prev. Yr.)			XXXXX	XX
17	Total Purchases & Beg. Inventory	(Add Lines 14 through 16)	XXXXX	XX		
18	GROSS INCOME FROM SHEEP	(Line 13 minus Line 17)	XXXXX	XX		
19	SWINE—Swine Sales	(P. 6, L. 3, Tot. Yr. Col.)			XXXXX	XX
20	Ending Inventory of Swine	(P. 9, L. 27, Col. 1)			XXXXX	XX
21.	Total Sales & End. Inventory	(Add Lines 19 & 20)	XXXXX	XX		
22	Swine Feeders Purchased	(Swine Items P. 6a, L. 19, Tot. Yr. Col.)			XXXXX	XX
23	Breeding Swine Purchased	(Swine Items P. 6a, L. 20, Tot. Yr. Col.)			XXXXX	XX
24	*Beginning Inventory of Swine	(P. 9, L. 27, Col. 1 of Previous Yr.)			XXXXX	XX
25	Total Purchases & Beg. Inventory	(Add Lines 22 through 24)	XXXXX	XX		
26	GROSS INCOME FROM SWINE	(Line 21 minus Line 25)	XXXXX	XX		
27	TOTAL LIVESTOCK GROSS INCOME	(Add Lines 9, 18 & 26)	XXXXX	XX		
28			XXXXX	XX	XXXXX	XX
29	Livestock Expenses	(P. 15, L. 47, Col. C)			XXXXX	XX
30	Value of Raised Grain Fed	(Estimate)			XXXXX	XX
31	Value of Raised Silage Fed	(Estimate)			XXXXX	XX
32	Value of Raised Hay Fed	(Estimate)			XXXXX	XX
33	Value of Raised Temporary Pasture Fed	(Estimate)			XXXXX	XX
34	Value of Raised Residue Pasture Fed	(Estimate)			XXXXX	XX
35	Value of Owned Permanent Pasture Used	(Estimate)			XXXXX	XX
36	Direct Livestock Expense**	(Add Lines 29 through 35)	XXXXX	XX		
37	Livestock Income Over Direct Costs**	(Line 27 minus Line 36)	XXXXX	XX		
38						
39						
40						

*Beginning Inventory of this year is the same as Ending Inventory in last year's record book.

**This cost figure does not include an interest charge on the operator's own capital or a charge on operator and unpaid family labor and management.

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Supply and Disposal of Livestock, Roughages & Grains

41	SUPPLY & DISPOSAL OF LIVESTOCK (Numbers)				
42	SUPPLY	CATTLE	SHEEP	HOGS	OTHER
43	Beginning Inventory (Number)				
44	Number Born During Year				
45	Number Bought During Year				
46	TOTAL SUPPLY (Add L. 42-45)*				
47	DISPOSAL				
48	Number Sold During Year				
49	Number Butchered				
50	Number Died During Year				
51	Ending Inventory (Number)				
52	TOTAL DISPOSAL (Add L. 48-51)*				
53	SUPPLY & DISPOSAL OF ROUGHAGES (Tons)				
54	SUPPLY	ALFALFA	PRAIRIE	SILAGE	OTHER
55	Beginning Inventory (Tons)				
56	Raised During Year				
57	Bought During Year				
58	TOTAL SUPPLY (Add L. 55-57)*				
59	DISPOSAL				
60	Sold During Year				
31	Rent to Landlord				
62	Ending Inventory (Tons)				
63	Fed to Livestock				
64	TOTAL DISPOSAL (Add L. 60-63)*				
65	SUPPLY & DISPOSAL OF GRAINS (Bushels)				
66	SUPPLY	WHEAT	CORN	GR. SORGHUM	OTHER
67	Beginning Inventory (Bushels)				
68	Raised During Year				
69	Bought During Year				
70	TOTAL SUPPLY (Add L. 67-69)*				
71	DISPOSAL				
72	Sold During Year				
73	Rent to Landlord				
74	Used for Seed, etc.				
75	Ending Inventory (Bushels)				
76	Fed to Livestock				
77	TOTAL DISPOSAL (Add L. 72-76)*				
78					
79					
80					

* Total supply should equal total disposal for each livestock and crop enterprise.

RECORD KEEPING

UNIT II

ASSIGNMENT SHEET #1: Income and Expenses

Correctly enter the following enteries in the Income and Expense pages of the Kansas Farm Account Book. Then completely close out this month income and expense pages.

150 January 2 - Borrowed $45,000 from Hometown Bank for 6 months @ 9.5% interest. (Paid $23,810 of previous loan and $1,190 interest)

151 January 6 - Received $500 from Treasure of the U.S. for conservation work.

152 January 10 - Sold 50 calves weighing 650# @ $42.50 cwt. (13,812.50) to Central Commission Co. Purchased 9/5/77 for $11,250.

153 January 20 - Received $90 from A.P. Smith for rent of farmhouse.

153 January 20 - Received $684 from U. Share (landlord) for share of crop expenses.

153 January 20 - Received $60 dividend from Am. Mutual Insurance Co.

153 January 20 - Sold 3 cull sows (2 raised, 1 purchased) 400# each for $28.50/cwt. to Valley Packing Co., Total $342. Purchased sow on depreciation schedule.

154 January 24 - CCC Loan for $4,162.50 on 1,850 bu. of wheat @ $2.25/bu.

155 January 25 - Received Valley Co-op proration $580 ($300 current cash, $280 prior year payment 1970; also $1,200 deferred).

156 January 26 - Sold 1,800 bu. wheat for $2.50/bu to Valley Co-op ($4,500) Wheat had a CCC Loan on it for $4,000.

157 January 28 - Sold disk that was on the depreciation schedule to Max Tillage for $1,500.

EXPENSE ENTRIES

Check No.

151 December 20 - Paid T-V Store for colored TV set. ($525)

152 December 20 - Paid Top-Grow Feeds (15 tons protein @ $200/ton) ($3,000)

153 December 20 - Paid Big Red Tractor Co., $14,324 "boot" on new tractor.

154 December 27 - Paid County Treasurer, property taxes ($480)

ASSIGNMENT SHEET # 1

155 January 2 - Paid Hometown Bank $25,000 ($23,810 on loan and $1,190 for interest.)

156 January 3 - Paid Corner Equipment Co. for tractor repairs, $127.50

157 January 5 - Paid $130 to REA for electric bill (75% farm)

158 January 8 - Purchased chain saw from Corner Equipment for $487.

159 January 8 - Safeway, groceries $43.50

160 January 8 - Contribution, $25 to United Way.

161 January 9 - Paid $9.60 to Long Oil Co. for car gas (60% farm share).

162 January 10 - Paid Jim Recorder (son under 21) for labor $150.

163 January 10 - Paid N.P. Brown for labor, $320.11 (gross wages $340 $19.89 S.S. withheld)

164 January 15 - Paid Dozer Cost. Co. $478 for shaping waterways.

165 January 15 - Purchased 35 calves from R. Black weighing 500 lbs @ $65 cwt. Total $11,375

166 January 15 - Paid K.S.U. $1,040 for enrollment of son (Jim) for spring semester

167 January 17 - Paid $52 to Dr. A.P. Johnson for calf medication

168 January 20 - Paid $60 to Style Shop for clothes.

169 January 20 - Paid $820 to Corner Equipment Co., for major overhaul of combine engine.

170 January 21 - Paid $1,548.43 to Valley Co-op ($14.10 calf antibiotics, $11.33 oil, and $1,523 for Super-G Hog Feed).

171 January 21 - Paid $750 to Home Insurance Co. for payment on HR-10 Plan for J.P. Recorder.

172 January 24 - Paid $5,300 to Federal Land Bank for land payment ($ 2,800 was interest, principal $2,500)

173 January 24 - Paid $60 to Ace Hardware, repairs on rental house.

174 January 25 - Paid Sunflower Insurance Co. $680 for insurance on farm building including $180 on the farm home.

175 January 26 - Paid ASCS Office $4,200 for wheat loan. ($4,000 principal, $200 interest).

ASSIGNMENT SHEET #1

176 January 28 - Paid Treasurer of Home County $86 for truck tags

177 January 29 - Dr. P.D. Jones $18 physical examination (75 miles round trip).

178 January 31 - Corner Drugs $12.50 prescription

179 January 31 - Yum-Yum Cafe $14.75 meals for hired labor.

RECORD KEEPING

UNIT II

ASSIGNMENT SHEET #2: Cash Flow

Transfer the total for January's income and expense pages to January column on cash flow page. Determine net cash flow for January. Then correctly enter the following information on pages 6 and 6a of the Kansas Farm Account Book.

CASH INFLOW P. 6

Line No.	Cash Receipt	Tot. Year Col.
1	Cattle	$122,535
3	Swine	40,500
8	Wheat	21,700
16	Govt. Payments	2,900
17	Gas & Oth, Ref. & Misc.	700
18	Mach, Bldgs. & Br. Lvst. Sales	2,500
A	CASH FARM RECEIPTS	$190,835
19	Current loans	95,000
23	Interest & Dividends	100
24	Oth. Outside Bus. Rec.	700
B	TOTAL CASH INFLOW	$286,635

CASH OUTFLOW P. 6a

Line no.	Cash Expenditures	Tot. Year Col.
1	Labor Hired	$ 5,000
2	Equip. & Mach. Rep	8,300
3	Bldg. Rep.	2,200
4	Interest	14,000
5	Cash Rent	3,800
6	Feed Purch.	24,800

ASSIGNMENT SHEET #2

Line no.	Cash Expenditures	Tot. Year col.
7	seed, crop Ins.	1,700
8	Herb. & Insect.	2,100
9	Fert. & Lime	8,700
10	Mach. Hire, Storage	1,200
11	Lvst., Mktg., Br. & Ins.	3,000
12	Vet. Med., Drugs	900
13	Gas, Fuel & Oil	6,000
14	Real & Per. Taxes, Gen Insurance	2,700
15	Utilities (all)	2,600
16	Cons. & Land Clearing	900
17	Auto Exp. (all)	1,000
18	Farm Org. Fees, Etc.	200
A	CASH OPER. EXP.	$ 89,100
19	Feeder Lvst. for Resale	117,000
21	Mach., Equip., Bldgs.	3,600
22	Current Prin.	51,000
23	Intermed. & Lg. Term Prin.	6,600
24	Income & Self Emp. Tax	2,200
25	Outside Business Exp.	300
26	Family Expense	10,700
B	TOTAL CASH OUTFLOW	$280,500

RECORD KEEPING

UNIT II

ASSIGNMENT SHEET #3: Owned and Rented Crop Production

Correctly enter this information on page 12 and 14 of the Kansas Farm Record Account Book.

OWNED CROP PRODUCTION INFORMATION - Page 12

Description	Acres	Production Per Acre	Production Total	Price/Unit	Tot.Value
Wheat*	160	30	4,800	$ 3.00	$14,400
Grain Sorghum*	130	50	6,500	2.00	13,000
Sorghum Silage*	60	12	720	12.00	8,640
Native Pasture	110	--	--	10.00	1,100
Farmstead, Waste	20	--	--	--	--

*Tillable-Dryland Crops

RENTED CROP PRODUCTION INFORMATION - Page 14

Description	Opr.%	Acres	Production Per Acre	Production Total	Price/Unit	Tot.Value	Landlords Share
Wheat*	66 2/3	240	27	6,480	$ 3.00	$19.440	$6,480
Grain Sorghum*	66 2/3	120	50	6,000	2.00	12,000	4,000
Native Pasture	100	270	--	--	10.00	2,700	0
Farmstead, Waste	—	10	--	--	--	--	--

*Tillable-Dryland Crops

RECORD KEEPING

UNIT II

TEST

1. Name three phases of farm business record keeping.

   a.

   b.

   c.

2. List eight tips in keeping farm records.

   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.

3. Record sample of income and expense entries.

RECORD KEEPING

UNIT II

ANSWERS TO TEST

1. a. Recording of receipts and expenses

   b. Keeping and using inventories

   c. Analysis of the farm business

2. a. Develop the habit of keeping your account book up to date

   b. Enter cash transactions daily or weekly

   c. Enter checks as written or at least once a month

   d. Deposit all farm income in your bank account

   e. Identify all items on your deposit slip - especially borrowed money, gifts, or other receipts NOT subject to income tax.

   f. Do most of your farm business by check

   g. Get your bank statement each month and check your account book with it

   h. In making entries of sales or purchases always write down:

      1. The date of the transaction
      2. The amount of the receipt or expense
      3. The name of the person or firm dealt with
      4. The kind of product sold or bought
      5. The number of units sold or bought
      6. The price of each unit

3. Record sample income and expense entries to the satisfaction of the instructor.

RECORD KEEPING

UNIT III

FARM INVENTORIES

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to define inventories, and correctly record inventory entries in the appropriate pages in the Kansas Farm Account Book. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Explain what the inventories indicate.
2. Explain when to take inventories.
3. List four uses of inventories.
4. Describe how to inventory receivables and payables.
5. List the four methods for the valuation of assets.
6. Demonstrate the ability to correctly do the following: (Assignment Sheets #1 and #2)
    a. Enter a payable schedule.
    b. Enter a receivables schedule.
    c. Inventory a given farming operation.

RECORD KEEPING

UNIT III

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparency
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and give to Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Master

   TM 1 - Uses for an Inventory
4. Assignment Sheets

   #1 - Inventory of Receivables and Payables

   #2 - Inventory of Livestock, Crops, and Supplies

INSTRUCTIONAL MATERIALS

5. Test

6. Answers to Test

References:

1. Inventory Resources for Farm Planning, VAS 2002b, University of Illinois at Urbana-Champaign.

2. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agricultural Education Curriculum Materials Service, Ohio State University.

3. The Farm Management Handbook, Mortenson, W.PS. and Luening, R.A., Interstate, pages 380-382.

4. Farm Record Keeping with the Kansas Farm Account Book, MF-408, Cooperative Extension Service, Kansas State University, Manhattan.

RECORD KEEPING

UNIT III

INFORMATION SHEET

I. What Inventories Indicate

A. Any business, farm, or other needs an annual evaluation to determine any progress of that business during the year.

B. Actual progress of a farm cannot be determined from year to year without an annual inventory.

1. A record of receipts, expenses, and purchased cost of feeder livestock sold during the year, plus depreciation schedules are adequate in arriving at net income for income tax purposes for those reporting on the "cash" basis.

2. There may be a gain or loss for the year that does or does not show up as cash.

II. When to Take an Inventory

A. Inventories should be made at the end of the regular year's business.

B. The ending inventory for one year is the beginning inventory for the next year.

III. Uses of Inventories (TM 1)

A. To calculate annual net income by the accrual method.

B. To provide a true picture of the farm business and to make possible a useful farm management analysis.

C. To measure changes in the total value of farm assets from year to year.

D. In making a net worth statement.

E. As an aid in securing needed credit.

IV. Inventory of Receivables and Payables

A. A record of money owed to the farm business is called receivables.

INFORMATION SHEET

B. Money owed by the farm business is payable.

C. Receivables include farm checking and savings accounts and notes owed to the farm such as PCA, CO-OP, and FBL stock.

D. Payables include taxes and rent due but unpaid, farm business accounts and loans owed by the farm, and outstanding checks and overdrafts.

E. All livestock (whether held for market or for breeding or dairy purposes) should be included.

F. Include all crops and supplies on hand at the beginning of the year (whether raised or purchased and whether held for sale or for use as feed, seed, etc.).

G. Show the number or quantity, the unit price, and total value for each livestock, crop, and supply item.

H. The inventorying process is still incomplete since neither depreciable assets nor land has yet been included. These are often a major share of total farm assets.

   1. Depreciable assets are kept in a depreciation schedule such as the Kansas Depreciation and Investment Book.

   2. The omission of these assets is corrected on page 15 of the Kansas Farm Account Book.

V. Methods of Valuation

   A. "Farm price" (market value less cost of marketing) is a good method of evaluating property when the inventory is to be used primarily for a farm management analysis and net worth statement.

   B. The "cost" method simply means that purchased items are valued at the actual purchase price plus any additional costs which increase their worth between purchase and inventory dates.

   C. Raised livestock may be valued under the "unit-livestock-price". Under this method, livestock is grouped according to kind and age and a standard price is assigned each group.

   D. "Cost-less-depreciation" is used for livestock purchased for breeding or dairy purposes, machinery and equipment.

USES FOR AN INVENTORY

AN INVENTORY CAN BE USED FOR SEVERAL PURPOSES INCLUDING:

1. TO CALCULATE ANNUAL NET INCOME BY THE ACCRUAL METHOD.
2. TO PROVIDE A TRUE PICTURE OF THE FARM BUSINESS AND TO MAKE POSSIBLE A USEFUL FARM MANAGEMENT ANALYSIS.
3. TO MEASURE CHANGES IN THE TOTAL VALUE OF FARM ASSESTS FROM YEAR TO YEAR.
4. IN MAKING A NET WORTH STATEMENT.
5. AS AN AID IN SECURING NEEDED CREDIT.

RECORD KEEPING

UNIT III

ASSIGNMENT SHEET #1: Inventory of Receivables and Payables

Correctly enter the following information on page 9 of the Kansas Farm Account Book.

INVENTORY OF RECEIVABLES AND PAYABLES

BEGINNING OF YEAR Page 8

(From Last Year's Account Book - Same as Ending Inventory)

RECEIVABLES

Checking Account, Hometown Bank	$ 850
U. Share (landlord), owed on share of crop expenses	684
Co-op Stock, Valley Co-op	2,800
FLB Stock	7,000

PAYABLES

Cattle Loan, Hometown Bank	45,000
Production Expense Loan, Hometown Bank	6,000
Machinery Loan, Hometown Bank (Four Year Note)	7,500
Land Mortgage, Federal Land Bank	120,000

END OF YEAR Page 8

RECEIVABLES

Checking Account, Hometown Bank	800
Co-op Stock, Valley Cooperative	3,000
FLB Stock	7,000

PAYABLES

Cattle Loan, Hometown Bank	105,000
Production Expense Loan, Hometown Bank	20,000
Machinery Loan, Hometown Bank (Four Year Note)	5,700
Land Mortgage	117,500

RECORD KEEPING

UNIT III

ASSIGNMENT SHEET #2: Inventory of Livestock, Crops, and Supplies

Correctly enter the following information on page 10 of the Kansas Farm Account Book.

INVENTORY OF LIVESTOCK, CROPS, AND SUPPLIES

BEGINNING OF YEAR Page 9
(From Last Year's Account Book - Same as Ending)

Livestock	No.	Price/Hd.	Avg. Wt./Hd.	Tot.Value
Beef Feed Calves	394	$203	450	$ 79,980
Sows	30	150	400	4,500
Gilts	10	130	300	1,300
Boars	2	250	600	500
Pigs	114	55	80	6,270
Pigs	130	25	25	3,250
				$ 95,800

Crops And Supplies	Bu. or T.	Price/Unit	Tot. Value
Wheat	6,000	$ 2.25	$ 13,500
Grain Sorghum	6,500	1.65	10,725
Sorghum Silage	650	12.00	7,800
Protein	--	--	2,500
Fertilizer	--	--	4,000
Gas	--	--	800
			$ 39,325
Owned Land	480A	450	216,000

ASSIGNMENT SHEET #2

END OF YEAR Page 9

Livestock	No.	Price/Hd.	Avg.Wt./Hd.	Tot.Value
Beef Feed Calves	395	$300	500	$118,500
Sows	32	150	400	4,800
Gilts	8	130	300	1,040
Boars	2	300	400	600
Pigs	110	60	75	6,600
Pigs	120	35	25	4,200
				$135,740

Crops And Supplies	Bu. or T.	Price/Unit	Tot. Value
Wheat	7,000	$ 3.00	$ 21,000
Grain Sorghum	6,400	2.00	12,800
Sorghum Silage	700	12.00	8,400
Protein	--	--	1,500
Fertilizer	--	--	3,500
Gas	--	--	600
			$ 47,800
Owned Land	480A.	450	216,000

RECORD KEEPING

UNIT III

TEST

1. Explain what inventories indicate.

2. When should one take an inventory?

3. List four uses of an inventory.

4. Describe how to inventory receiveables and payables.

5. List the four methods for the valuation of assets.

6. Enter sample entries for payables, receivables, livestock, crops, and supplies in the Kansas Farm Account Book.

RECORD KEEPING

UNIT III

ANSWERS TO TEST

1. A. Any business, farm, or other, needs an annual evaluation to determine any progress of that business during the year.

   B. Actual progress of a farm cannot be determined from year to year without an annual inventory.

      1. A record of receipts, expenses, and purchases cost of feeder livestock sold during the year, plus depreciation schedules are adequate in arriving at net income for income tax purposes for those reporting on the "cash" basis.

      2. There may be a gain or loss for the year that does or does not show up as cash.

2. A. Inventories should be made at the end of the regular year's business.

   B. The ending inventory for one year is the beginning inventory for the next year.

3. A. To calculate annual net income by the accrual method.

   B. To provide a true picture of the farm business and to make possible a useful farm management analysis.

   C. To measure changes in the total value of farm assets from year to year.

   D. In making a net worth statement.

   E. As an aid in securing needed credit.

4. A. A record of money owed to the farm business is called receivables.

   B. Money owed by the farm business is payable.

ANSWERS TO TEST

C. Receivables include farm checking and savings accounts and notes owed to the farm such as PCA, CO-OP, and FLB stock.

D. Payables include taxes and rent due but unpaid, farm business accounts and loans owed by the farm, and outstanding checks and overdrafts.

E. All livestock (whether held for market or for breeding or dairy purposes) should be included.

F. Include all crops and supplies on hand at the beginning of the year (whether raised or purchased and whether held for sale or for use as feed, seed, etc.)

G. Show the number or quantity, the unit price, and total value for each livestock, crop, and supply item.

H. The inventorying process is still incomplete since neither depreciable assets nor land has yet been included. These are often a major share of total farm assets.

1. Depreciable assets are kept in a depreciation schedule such as the Kansas Depreciation and Investment Book.

2. The omission of these assets is corrected on page 15 of the Kansas Farm Account Book.

5. A. "Farm price" (market value less cost of marketing) is a good method of evaluating property when the inventory is to be used primarily for a farm management analysis and net worth statement.

B. The "cost" method simply means that purchased items are valued at the actual purchase price plus any additional costs which increase their worth between purchase and inventory dates.

C. Raised livestock may be valued under the "unit-livestock-price". Under this method, livestock if grouped according to kind and age and a standard price is assigned each group.

D. "Cost-less-depreciation" is used for livestock purchased for breeding or dairy purposes.

6. Complete to the satisfaction of the instructor.

RECORD KEEPING

UNIT IV

INVENTORIES: NON-DEPRECIABLE ASSETS

TERMINAL OBJECTIVE

Upon completion of this unit, students will be able to demonstrate the correct procedures and mechanics for taking an inventory of non-depreciable assets. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Define non-depreciable assets.

2. Take an inventory of non-depreciable assets.

RECORD KEEPING

UNIT IV

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Tons per cubic feet of silage

   TM 2 - Approximate storage capacity of round steel bulk feed tanks

   TM 3 - Approximate storage capacity of rectangular bins

   TM 4 - Approximate storage capacity of cylindrical bins

   TM 5 - Capacity of horizontal silos

   TM 6 - Approximate dry matter capacity of silos

INSTRUCTIONAL MATERIALS

4. Test
5. Answers to Test

References:

1. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agricultural Education Curriculum Materials Service, Ohio State University.
2. Structures and Environment Handbook, Midwest Plan Service, Extension Agricultural Engineer, Kansas State University.

RECORD KEEPING

UNIT IV

INFORMATION SHEET

I. Non-Depreciable Assets

They are a result of the production process and they are items without depreciation. Items included in this category are grain, hay, straw, raised livestock, market animals, and land.

II. Procedure for Taking the Beginning Inventory of Non-Depreciable Assets

A. Corn and Small Grain (TM 2,3,4)

1. Ear corn in crib
   length x width x depth x .4 (or divide by 2½) = bushels

2. Ear corn in round crib
   ½ diameter x ½ diameter x height x 3.14 x .4 (or divide by 2½) = bushels

3. Shelled corn or grain in rectangular bin
   length x width x depth x .8 (or divide by 1¼) = bushels

4. Shelled corn or grain in round bin
   ½ diameter x ½ diameter x height x 3.14 x .8 (or divide by 1¼) = bushels

B. Hay and Straw

1. Hay in the mow
   length x width x height ÷ 250 = tons

2. Baled hay or straw
   number of bales x average weight per bale ÷ 2000# = tons

C. Silage (TM 1,5,6)

1. Tower silo

   a. Silage Chart - corn silage chart is based on settled silage at 65% moisture. To find tons of silage in silo not full, measure height of silage from silo floor and use capacity chart for approximate tons in silo

   b. Cubic Capacity - to compute exact cubic capacity of a silo, multiply ½ of the diameter (the radius) by itself; then multiply the result by 3.1416 (Pi) or for convenience by

INFORMATION SHEET

3.14; multiply this result by inside height of the silo from the floor. This result is the cubic foot capacity of the silo

Example: a silo 10 ft. by 40 ft.
Answer: 5x5x3.1416 x 40 = 3141.6 cu. ft.

D. Trench silo

1. Capacity Chart - average width x length x depth of silage (in feet) x tons per cubic foot of depth = tons

   Example: a trench silo 12 feet wide at the bottom and 16 feet at the top has an average depth of silage of 10 feet. There are 60 feet of the length of the trench left to feed. 14 (average width) x 10 x 60 x .01365 = 115 tons

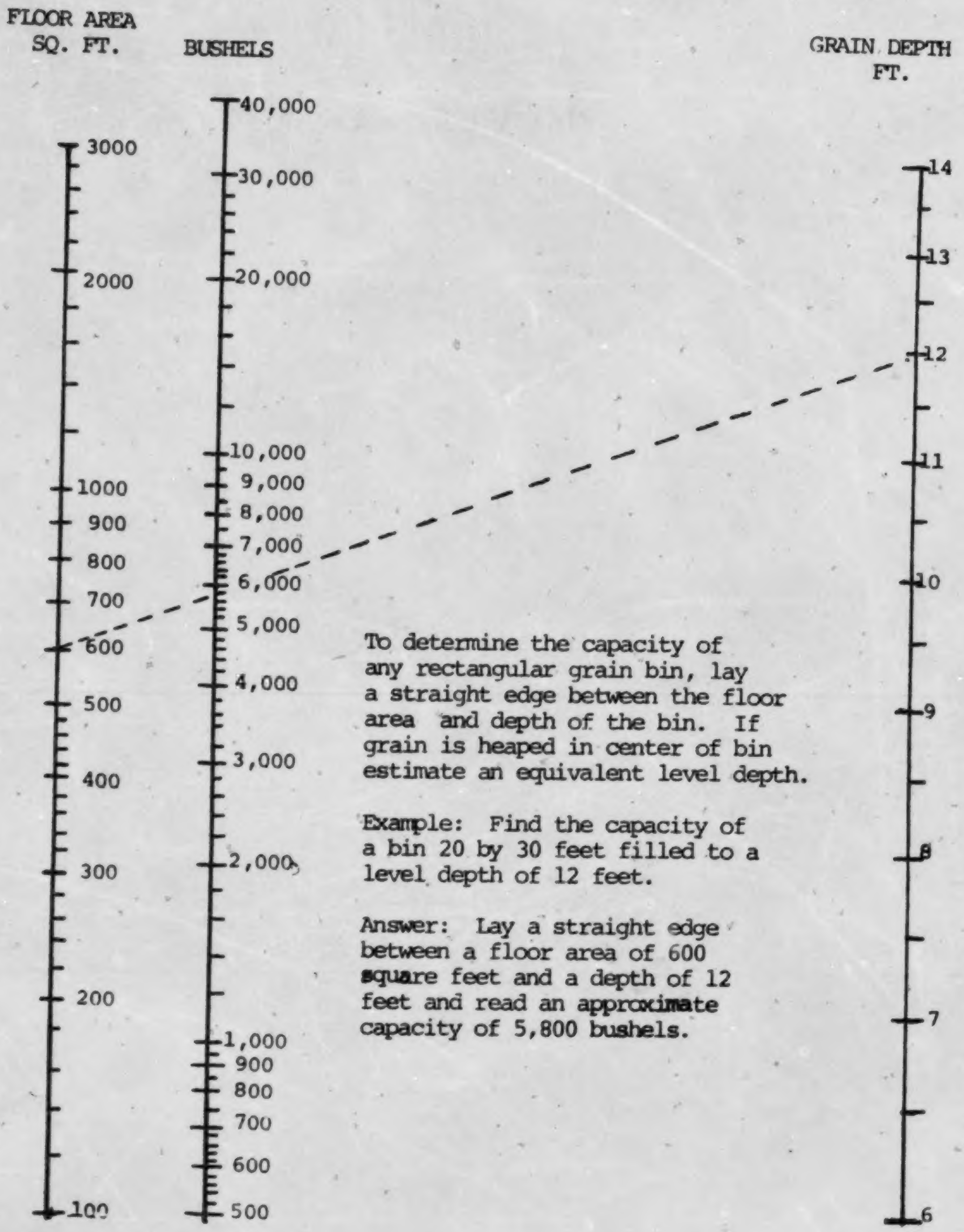
Tons Per Cubic Feet of Silage

DEPTH OF SETTLED SILAGE (FEET)	TONS PER CUBIC FOOT
1	.00925
2	.00985
3	.01040
4	.01090
5	.01140
6	.01190
7	.01235
8	.01280
9	.03120
10	.01365
11	.01405
12	.01445
13	.01490
14	.01530
15	.01565

Approximate Storage Capacity of Round Steel Bulk Feed Tanks

DESCRIPTION	APPROXIMATE OVERALL HEIGHT-FEET	TONNAGE CAPACITIES MATERIALS WEIGHING			APPROXIMATE TOTAL CAPACITY	
		30#/CU FT	40#/CU FT	50#/CU FT	CU FT	BU
6′ DIAMETER-CENTER DRAW OFF, 60° HOPPER, 20-24″ SLIDE VALVE CLEARANCE	10 - 10½	2.0	2.7	3.4	135	108
	10½- 13	3.1	4.2	5.3	210	166
	15½- 16	4.2	5.7	7.1	285	228
	18 - 18½	5.4	7.2	9.0	360	288
	20 - 20½	6.2	8.6	10.4	415	322
6′ DIAMETER-SIDE DRAW-OFF 60° HOPPER 24″ SLIDE VALVE	14½- 15	2.8	3.7	4.7	187	150
	17 - 17½	3.9	5.2	6.6	263	210
	19½- 20	5.0	6.7	8.4	338	270
	22½- 23	6.1	8.2	10.3	413	330
	25 - 25½	7.3	9.7	12.1	487	390
9′ DIAMETER-CENTER DRAW OFF, 60° HOPPER, 24″ SLIDE VALVE CLEARANCE	16½- 17	8.4	11.2	14.0	561	413
	19½- 20	11.0	14.6	18.3	730	583
	22 - 22½	13.5	18.0	22.5	900	720
	24½- 25	16.0	21.3	26.7	1067	853
	27½- 28	18.6	24.7	30.9	1236	990
12′ DIAMETER-CENTER DRAW OFF, 60° HOPPER, 24″ SLIDE VALVE CLEARANCE	20 - 20½	16.3	21.7	27.1	1085	870
	22½- 23	20.7	27.7	34.6	1383	1111
	25½- 26	25.2	33.6	42.0	1681	1345
	28 - 28½	29.7	39.6	49.5	1980	1585
	30 - 30½	34.2	45.6	57.0	2278	1820
	33 - 33½	38.7	51.5	64.4	2577	2060
	36 - 36½	43.1	57.5	71.9	2875	2300
	38½- 39	47.6	63.5	79.3	3174	2540
	41½- 42	52.0	69.4	86.8	2472	2780

Approximate Storage Capacity of Rectangular Bins

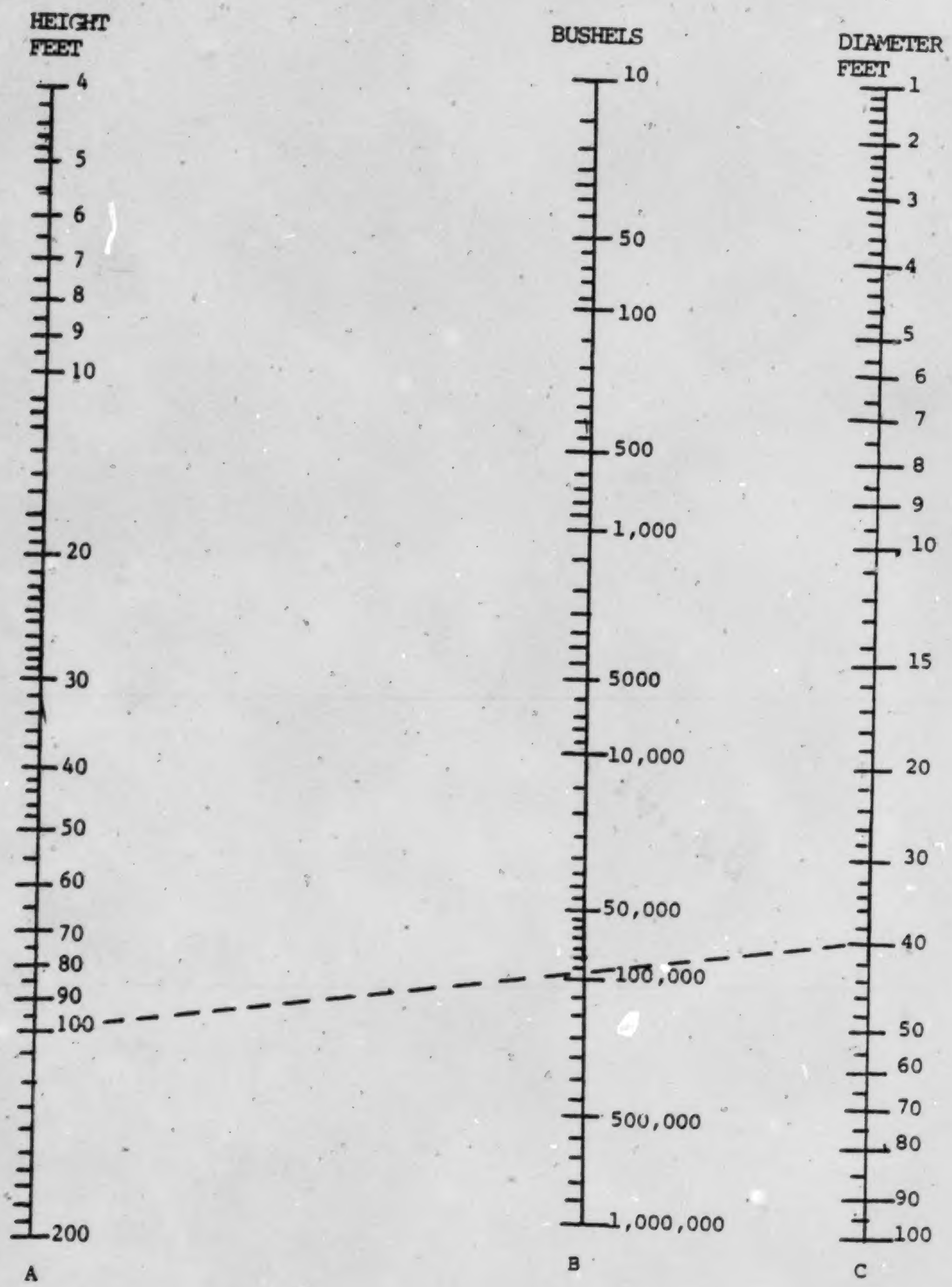


To determine the capacity of any rectangular grain bin, lay a straight edge between the floor area and depth of the bin. If grain is heaped in center of bin estimate an equivalent level depth.

Example: Find the capacity of a bin 20 by 30 feet filled to a level depth of 12 feet.

Answer: Lay a straight edge between a floor area of 600 square feet and a depth of 12 feet and read an approximate capacity of 5,800 bushels.

APPROXIMATE STORAGE CAPACITY OF CYLINDRICAL BINS



Capacity of Horizontal Silos

Capacities of horizontal silos per 10 feet of length (level full at 50 cu ft = 1 ton)

Depth Ft.		Silo floor width, ft.									Closed end ratio
		20'	30'	40'	50'	60'	70'	80'	90'	100'	
10'	Bu	1800	2600	3400	4200	5000	5800	6600	7400	8200	1/8
	Tons	45	65	85	105	125	145	165	185	205	
12'	Bu	2200	3168	4128	5088	6048	7008	7968	8928	9888	1/7
	Tons	55	79	103	127	151	175	199	223	247	
14'	Bu	2632	3752	4872	5992	7112	8232	9352	10472	11592	1/6
	Tons	66	94	122	150	178	206	234	262	290	
16'	Bu	3064	4344	5624	6904	8184	9464	10744	12024	13304	1/5
	Tons	77	109	141	173	205	237	269	301	333	
18'	Bu	3528	4968	6408	7848	9228	10728	12168	13608	14048	1/5
	Tons	88	124	160	196	232	268	304	340	376	
20'	Bu	4000	5600	7200	8800	10400	12000	13600	15200	16800	1/4
	Tons	100	140	180	220	260	300	340	380	420	

Example: 50' wide, 12' deep, 120' long, 1 end closed. Capacity per 10 from table = 127 tons. Capacity per 12 12 x 127 = 1524 tons. Closed end hods additional silage.

Multiply closed end ratio for silage depth times the capacity/10': 1/7 x 127 = 18 about). Open end is less than full. Deduct for capacity lost:

Slope of silage	Deduction
1/4	closed end capacity
1/2	2 x "
1/1	4 x "

Assume slope of 1/2.
Closed end capacity =

APPROXIMATE DRY MATTER CAPACITY OF SILOS

Depth of Settled Silage, ft	Silo Diameter, ft										
	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'
	TONS of dry matter										
20'	8	12	16	21	27	33	40	47	56	65	74
22	9	14	19	24	30	38	48	54	64	74	85
24	11	15	21	27	34	43	52	61	72	83	96
26	12	17	23	30	38	48	58	68	81	94	107
28	13	19	26	35	44	53	64	76	90	104	119
30	15	21	29	38	47	59	71	84	99	115	132
32'	16	23	32	41	52	65	78	93	109	127	145
34	18	25	34	45	57	70	85	101	119	137	158
36	19	28	37	48	62	76	92	109	129	150	172
38	21	30	41	53	67	82	100	118	139	161	185
40	22	32	44	57	72	89	107	127	150	173	199
42'		34	47	61	77	95	115	137	161	186	214
44		37	50	65	82	102	123	146	172	200	229
46		39	53	69	88	108	131	155	183	212	244
48		42	56	74	93	115	140	166	195	226	260
50		44	60	78	99	122	148	175	206	239	274
52'			64	83	105	129	157	186	219	254	291
54			67	88	111	137	165	197	231	267	306
56			71	93	117	144	174	207	243	282	324
58			74	98	123	151	183	218	261	297	339
60			78	102	129	159	192	228	273	309	357
62'					135	167	201	239	287	324	374
64					142	174	210	250	301	339	391
66					149	182	219	260	314	354	407
68					155	190	228	271	328	369	424
70					162	198	237	282	342	384	441
72'								293	356	400	458
74								305	371	415	476
76								316	385	431	493
78								328	400	446	511
80								339	414	462	528

To estimate tons of silage of various moisture contents multiply Tons of dry matter x

$$\frac{100}{\text{estimated \% dry matter in silage}} = \text{tons actual silage.}$$

RECORD KEEPING

UNIT IV

TEST

1. Define non-depreciable assets.

2. (a) How much silage is in a trench 12 ft. wide at the bottom, 16 ft. at the top, has an average depth of silage at 10 ft. and has 60 ft. of the length of the trench left to feed?

   (b) How many tons of hay are left in a shed if there are 20 rows long by 10 bales high by 20 bales deep? Each bale averages 60 pounds.

   (c) Complete sample entries in the Kansas Farm Account Book.

RECORD KEEPING

UNIT IV

ANSWERS TO TEST

1. They are a result of the production process, and they are items without depreciation. Items included in this category are grain, hay, straw, supplies, raised livestock, market animals, and land.

2. (a) 14 (Average width) x 10 x 60 x .01365 = 115 tons

   (b) 20 x 20 x 10 x 60# ÷ 2000 = 120 tons

   (c) Graded to the satisfaction of the instructor

RECORD KEEPING

UNIT V

DEPRECIATION METHODS

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to demonstrate the correct procedure and mechanics for inventorying depreciable assets. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Define a depreciable asset.
2. Describe depreciation and salvage value.
3. Determine salvage value.
4. List three practices in using depreciation.
5. Illustrate methods of computing depreciation.
6. Figure additional first year depreciation.
7. List considerations when determining depreciation strategy.

RECORD KEEPING

UNIT V

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and give to Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

    TM 1 - Comparison of Depreciation Methods

    TM 2 - Depreciation Guidelines

    TM 3 - Straight-line: Salvage value less than 10% of Cost

    TM 4 - Partial Year

    TM 5 - Trade-In

INSTRUCTIONAL MATERIALS

TM 6 - Overhaul of Equipment

TM 7 - Double Declining Balance Method

TM 8 - Additional First Year Guidelines

TM 9 - Additional First Year 20% Depreciation

4. Assignment Sheets

   #1 - Depreciation Worksheet

   #2 - Inventory of Depreciable Assets

5. Test

6. Answers to Test

References:

1. "Choosing Depreciation Methods" MF-340, Cooperative Extension Service, Kansas State University, Manhattan.

2. Farm Records - A Management Tool, Ohio Agricultural Education Curriculum Materials Service, Ohio State University.

3. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agricultural Education Curriculum Materials Service, Ohio State University.

4. "Income Tax Management for Farmers," North Central Regional Extension Publication No. 2, Cooperative Extension Programs, University of Wisconsin.

RECORD KEEPING

UNIT V

INFORMATION SHEET

I. Definition of Depreciable Assets: An outlay of capital is required to acquire. Also, they are items with depreciation. Items included in this category are power machinery, equipment, purchase breeding livestock, and building and improvements.

II. Depreciation and Salvage Value

A. Description of Depreciation and Salvage Value

1. The wear, tear and obsolescence of property causes a a decrease in value referred to as "depreciation." This depreciation in value of capital items (those with a useful life of over one year) is a legitimate tax deductible cost for the owner when the item is used in the trade or business or held for producing income. However, unlike operating costs, the depreciation cost cannot all be reported in one year, but rather a portion of it claimed annually over the life of the item. The depreciation costs for tax deduction purposes are calculated independently of the actual payment procedures. Only that part of the original cost which is not recovered by a trade or sale can be claimed as deductible for tax purposes.

2. The cost which is recovered by a trade or sale is referred to as salvage value.

3. Cost minus salvage value equals depreciation.

III. Determination of Salvage Value

A. While true salvage value is not known at the time of purchase, it should be estimated in order to determine a realistic amount of depreciation expected during the useful life of the item.

B. In determining salvage value, the following should be considered:

1. Years the item is expected to be used

2. The expected condition of the item at the end of its useful life

INFORMATION SHEET

3. The degree of obsolescence expected during its useful life

C. Practices in Establishing Salvage Values

1. If salvage value is estimated to be 10% or less of the original cost basis (cash cost plus book value of assets traded in), salvage value can be omitted.

2. If salvage value is estimated to be over 10% of the original cost basis, the salvage value should be calculated.

3. With new machinery and equipment, the 10% or over figure is often suggested.

4. With livestock, use "true" salvage value.

5. No salvage value is used on buildings.

IV. Practices in Using Depreciation

A. Stock-in-trade and land are not depreciable. Land is regarded as permanent and having no measurable useful life.

B. Dirt dams, terraces, drainage ditches, etc., are not depreciable, but may qualify as soil and water conservation expenses.

C. Regular depreciation is allowable for only that portion of the year the asset is owned. (Figure ownership to the nearest whole month).

D. There are several methods allowed by the Internal Revenue Service for reporting depreciation:

1. Straight-line method

2. Declining balance method

3. Sum-of-the-years digits method

E. The methods of reporting depreciation have quite different calculations and often the choice of method is made on the basis of the easiest to calculate. However, the methods are considerably different - for instance, in the speed with which depreciation can be claimed - which in turn affects greatly the financial aspects of the business.

INFORMATION SHEET

V. Methods of Computing Depreciation (TM 1,2,3,4,5,6,7)

A. Straight-line

1. The straight-line method of computing depreciation is the simplest.

   a. Divide the total anticipated depreciation by the expected number of years of machine life to find the depreciation charge for each year

   b. The total anticipated depreciation is the purchase price of the item minus the salvage value when the asset is finally discarded

EXAMPLE:

Assume a farmer purchased a new tractor for $24,000. He expects it to last for ten years and has estimated the salvage value at $4,000

Cost	$24,000	
Salvage Value	4,000*	10 years = $2,000
Anticipated depreciation	$20,000	Annual Depreciation

2. Straight-line depreciation summary

   a. Amount of depreciation is the same each year

   b. Slowest method for claiming depreciation

   c. Easiest method to calculate

3. Partial calendar year guidelines

   a. Depreciation during first year of ownership can only be taken for part of year owned.

   b. Any purchase prior to the 15th of the month, use as full month

   c. Any purchase after 15th of the month, count none of the month

INFORMATION SHEET

EXAMPLE: The farmer bought his new $24,000 tractor on July 10.

Months of depreciation = 6 (July - December)

Six months = $\frac{6}{12} = \frac{1}{2}$ of annual depreciation

Since $2,000 was the annual depreciation, the current year depreciation = ½ x 2,000 = $1,000
The following year's depreciation will be $2,000/yr

4. Trade-In

   a. When calculating the depreciation of a piece of equipment that was part of a trade-in, the original price is not the total cost of the new piece of equipment. The total cost is the unrecovered cost plus cash "boot" paid

Example: The farmer traded in an old tractor for a new one. The old one was still on the inventory with an unrecovered cost of $2400. The "boot" or difference paid was $18,000. Assume 10 years of life and $4,000 salvage value.

Trade-in tractor unrecovered cost	$ 2,400
boot +	18,000
	$ 20,400

Therefore:	New tractor original cost	$ 20,400
	Salvage value	4,000
	Total depreciation	$ 16,400

$\frac{\$16,400}{10 \text{ years}}$ = $1,640 annual depreciation

5. Combination of factors: partial year and trade-in

INFORMATION SHEET

EXAMPLE: The farmer buys a new tractor (A) for $24,000 on April 10, 1978. It was estimated to have a life of 10 years and a salvage value of $4,000. The tractor (A) was traded for another new tractor (B) on July 24, 1983, with a boot paid of $30,000. This new tractor (B) was estimated to have a useful life of 7 years and a salvage value of $9,000.

INFORMATION SHEET

Unrecovered Cost of Tractor A

$24,000	original cost
- 4,000	salvage value
20,000	total depreciation

$\frac{20,000}{10 \text{ yrs.}} = \$2,000$

1980	$1,500	(1980 = $\frac{9}{12} = \frac{3}{4}$ x $2000 = 1500)
1981	2,000	
1982	2,000	
1983	2,000	
1984	2,000	
1985	1,167	(1985 = $\frac{7}{12}$ x 2000 = 1,167)
	10,667	depreciation

$24,000	original cost
-10,667	depreciation
13,333	unrecovered cost July 24, 1985

Tractor B

$13,333	unrecovered cost
+30,000	boot
43,333	total cost
- 9,000	salvage value
34,333	total depreciation

$\frac{34,333}{7 \text{ yrs.}} = \$4,904.71$ annual depreciation

1985 = 5 months = $\frac{5}{12}$ x 4904.71 = 2043.63

43,333.00	cost
2,043.63	1985 depreciation
41,289.37	unrecovered cost beginning of 1986

6. An overhaul of equipment is treated as a trade-in.

Example: A farmer bought a tractor on January 6, 1978 for $16,000 at a farm sale. It was set up on 8 years of useful life with a salvage value of $2000. It turned out to have a warped head and cracked block. The overhaul job cost $2750 and was completed December 28, 1978. Entries are made as if there were two tractors.

Unrecovered Cost of Tractor

$16,000	cost
- 2,000	salvage value
14,000	depreciation

$\frac{14,000}{8 \text{ yrs.}} = \$1750$ annual depreciation

1978 $1750

16,000	cost
1,750	1978 depreciation
14,250	unrecovered cost on December 28, 1978

Overhaul Entry

$ 14,250	unrecovered cost
+ 2,750	overhaul cost
17,000	cost
- 2,000	salvage value
15,000	depreciation

$\frac{15,000}{8 \text{ yrs.}} = \$1,875$ annual depreciation

INFORMATION SHEET

B. Double Declining Balance

1. Conforms more closely to the actual decline in the resale value of the asset.

2. The same percentage of the remaining value (cost minus prior depreciation) is deducted each year for depreciation.

3. The declining balance rate can be twice the rate for the straight-line method.

4. The rate or percent of annual depreciation for declining balance is determined as follows:

---

5 Years Expected Life	10 Years Expected Life
$\frac{100\%}{5 \text{ yrs.}}$ = 20% annually (straight-line)	$\frac{100\%}{10 \text{ yrs.}}$ = 10% annually (straight-line)
20% x 2 = 40% annually (declining balance)	10% x 2 = 20% annually (declining balance)

---

5. No salvage value is deducted from the original cost, but the farmer never depreciates below his estimated salvage value.

EXAMPLE:

Assume a farmer purchased a new tractor for $24,000, and he expects it to last for ten years.

1) $\frac{100\%}{10}$ = 10% x 2 = 20% rate of depreciation

2) Cost - $24,000 x 20% = $4,800 depreciation first year

3) Unrecovered cost at beginning of 2nd year

$$\begin{array}{r} \$24{,}000 \\ \underline{-\ 4{,}800} \\ 19{,}200 \end{array} \times 20\% = \$3{,}840$$

depreciation second year

INFORMATION SHEET

4) Unrecovered cost at beginning of 3rd year

$$\begin{array}{r} \$19{,}200 \\ \underline{-\ 3{,}840} \\ 15{,}360 \times 20\% = \$3{,}072 \end{array}$$

depreciation third year

C. Sum-of-the-Years Digits Method

1. If it is desired to distribute the depreciation expense more heavily in the first years of life and more lightly in the later years, the sum-of-the-years digits method has some advantages over the declining balance method.

2. Figuring depreciation by the sum-of-the-years digits consists of two steps:

   a. Determining the total anticipated depreciation. This is accomplished in the same manner as used in the straight-line method. (Original cost minus salvage value).

   b. Determining the distribution rate base. This is achieved by adding up the digits representing the years of expected life; for example, if the expected life is six years:

      6 + 5 + 4 + 3 + 2 + 1 = 21, 6/21 the 1st year, 5/21 the 2nd year, etc.

Assume a farmer purchased a new tractor for $24,000, he expects it to last ten years and has estimated the salvage value at $4,000.

(1)	Original cost	-	Salvage value	=	depreciation
	$24,000	-	$4,000	=	$20,000

(2) 10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 55

1st year - $\frac{10}{55}$ x 20,000 = 3636.36 depreciation 1st year

2nd year - $\frac{9}{55}$ x 20,000 = 3272.73 depreciation 2nd year

INFORMATION SHEET

3rd year - $\frac{8}{55}$ x 20,000 = 2909.09 depreciation 3rd year

Etc.

D. Summary

1. The straight-line method allows the same amount of depreciation changes each year.

2. The latter two methods of figuring depreciation provide a more rapid rate of write-off in the early years of the life of the investment, but a slower rate in the later portion of its useful life with the declining balance giving the greatest rate of write-off in the earlier years.

EXAMPLE: Figures are for a $8,000 tractor with a $2,000 salvage value and ten years of useful life.

TABLE 1

DEPRECIATION COMPARISON TABLE

Year	Straight-Line 10 Percent	Declining Balance 20 Percent	Sum of the Years Digits
1st	$ 2,000	$ 4,800.00	$ 3,636.36
2nd	2,000	3,840.00	3,272.73
3rd	2,000	3,072.00	2,909.09
4th	2,000	2,457.60	2,545.45
5th	2,000	1,966.08	2,181.82
6th	2,000	1,572.86	1,818.18
7th	2,000	1,258.29	1,454.54
8th	2,000	1,006.63	1,090.91
9th	2,000	26.54	727.28
10th	2,000	-0-	863.64
TOTAL	$ 20,000	$ 20,000.00	$ 20,000.00
Salvage Value	4,000	4,000.00	4,000.00

INFORMATION SHEET

3. Under no circumstances may an item be depreciated below the salvage value established at the time of purchase.

   a. For ease of calculating depreciation, income tax law permits the salvage value of an asset to be reduced by 10 percent of the basis on assets with a life of three years or more.

   b. If the salvage value is 10 percent or less of cost, it can be disregarded in figuring annual depreciation, but one cannot depreciate an item below salvage value.

   EXAMPLE #1:

   A farmer purchases a $24,000 tractor with a life of ten years. He estimates salvage value to be $4,000. Since he can reduce salvage by 10 percent of the cost, he subtracts $2,400 from the $4,000 and uses $1,600 as salvage in figuring depreciation.

   EXAMPLE #2:

   The same situation except this farmer estimates salvage value at $2,000. This is 10 percent of the cost so salvage can be ignored and the $2,400 would be used for depreciation.

   A farmer may select any method of figuring depreciation when a depreciation schedule is established for new property added to the farm business. For income tax purposes, any change in method of depreciation rate requires the consent of the Internal Revenue Service. However, a farmer can change from a more rapid rate of write-off (either declining balance or sum-of-the-years digits) to the straight-line method at any time during the useful life of the property.

VI. Additional First Year 20% Depreciation (TM 8,9)

A. Rules

1. The property must have a life of 6 years or more.

2. It is applied to the total cost of such properties of not more than $10,000 for a separate return or $20,000 for a joint return.

INFORMATION SHEET

3. Property must not be acquired from spouse, parent, child, or other ancestor of lineal descendent or their trusts, corporations, partnerships, etc.

4. Can be applied to either new or used property.

5. If property is acquired through a trade, only the cash difference paid is subject to this additional depreciation.

6. Real property does not qualify -- grain bins, buildings.

EXAMPLE:

A machine is purchased for $4,900 on October 10, 1980. The salvage value is estimated to be $300 at the end of its useful life (10 years).

$4,900 x 20% = $980 additional first year depreciation

$4,900	cost
- -0-	salvage value
4,900	
- 980	additional first year depreciation
$3,920	straight-line depreciation

$\frac{3,920}{10}$ = $392 annual depreciation

3 months = 3/12 = ¼ x 392 = $98 (1980 depreciation)

$ 98	straight-line depreciation in 1980
980	additional first year 20% depreciation
$1,078	total depreciation in 1980

VII. Depreciation Strategy Considerations

A. Keep depreciation in mind for purchases all through the year. You will usually be ahead to use the most rapid method of depreciating farm equipment and breeding stock.

1. It enables you to time buying strategically, and prevents missing a bet on a tax-saving purchase.

2. Take advantage of rapid depreciation methods.

INFORMATION SHEET

3. Rapid depreciation is receiving an interest-free loan from the government.

    a. During the early years when depreciation is greatest, you receive the loan and then in later years when depreciation declines drastically (a characteristic of rapid depreciation methods), you begin paying it back.

    b. This is the key; rarely today does a progressive farmer ever reach a leveling off in capital investment. He must continue to purchase new labor-saving, higher-capacity facilities and equipment.

B. Faster Methods Best

1. Declining balance and sum-of-the-years digits provide the methods of writing-off the depreciation faster than under the straight-line method at about two-thirds of the cost during the first one-half of the life.

2. The following table gives a year by year comparison for 10 years:

In this table, a machine costs $6,000 and has an estimated useful life of ten years. Salvage is figured at $600 or 10 percent of the cost so it may be ignored. If salvage is more than 10 percent, the excess must be deducted from the cost before computing depreciation on the straight-line and sum-of-the-years digits methods. On the declining balance method, depreciation ceases when salvage is reached.

TABLE 2

Taking the Beginning Inventories of Depreciable Assets

Straight-Line	Declining Balance	Sum-of-the-Years Digits
$ 1,680*	$ 2,160*	$ 2,073*
480	768	785
480	614	698
480	492	611
480	393	524
480	315	436
480	252	349
480	201	262
480	161	174
480	129	87
$ 6,000	$ 5,485	$ 5,999

INFORMATION SHEET

*Includes additional first year depreciation of 20% of the cost of the asset.

At the end of three and five years, the totals are:

Straight-Line	Declining Balance	Sum-of-the-Years Digits
$ 2,640	$ 3,542	$ 3,556
3,600	4,427	4,691

C. Switch After 5 Years

1. The declining balance method levels out after the fifth year.

2. It is advantageous to switch to the straight-line method at that time to continue to gain in depreciation.

3. If you trade or sell during the early years, the recapture provisions of IRS Section 1245 cause the amount of gain on sale of the asset representing depreciation previously taken to be taxed as ordinary income.

EXAMPLE: You purchase a tractor for $4,000, depreciate it to $2,500, but sell it for $3,000. The $500 gain would be taxed as ordinary income rather than capital gain.

D. Discussion questions for the preceding discussion, Depreciation Strategy Considerations.

1. Do farmers time their buying or is timing of sales a more common practice?

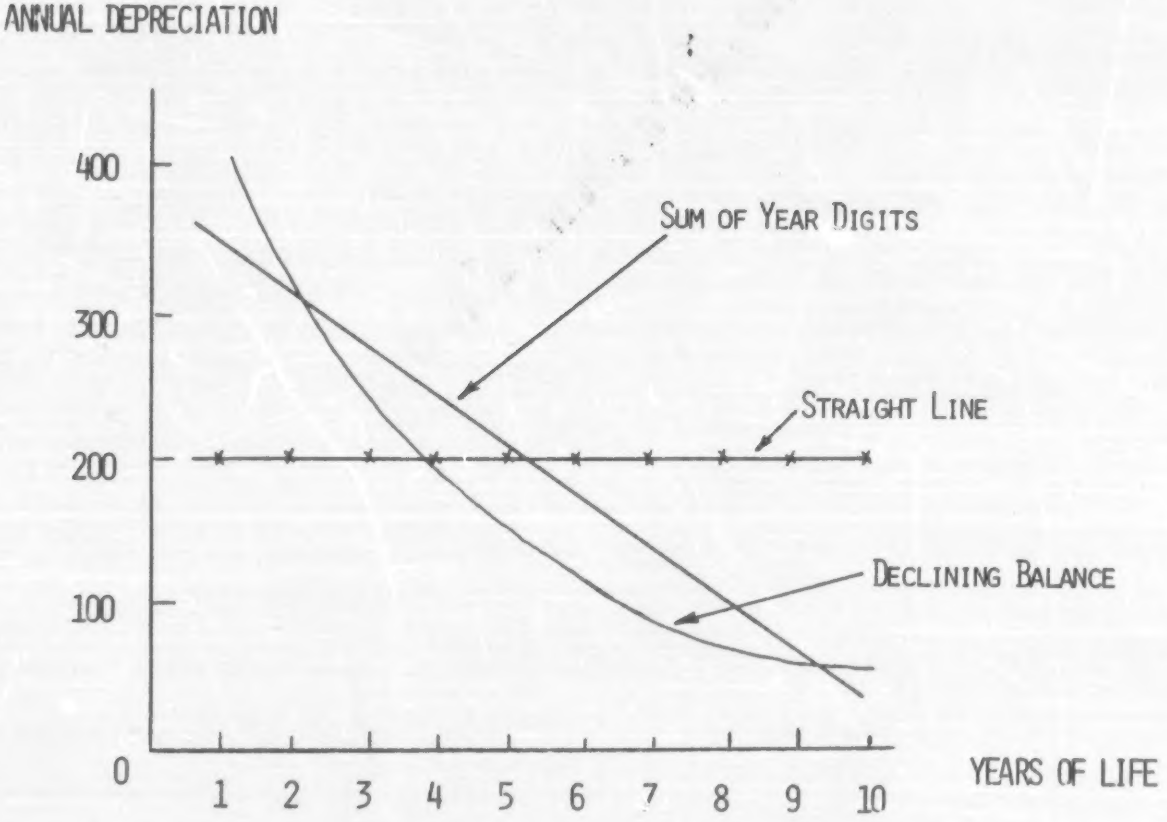
2. Is salvage value ignored or is it ignored in calculating depreciation?

3. Does the declining balance method level out depreciation after the fifth year?

4. Is money released for use in the farm business?

5. Should a farmer switch methods of calculating depreciation after five years?

Comparison of Depreciation Methods



TM I

SE U5-17

SE U5-18

DEPRECIATION GUIDELINES

Kind of Property	Class of Life Guidelines	Eligible for Additional 20% 1st Year Depreciation?	DEPRECIATION, METHOD AND BASIS			Eligible for Investment Credit?
			Eligibility of Straight Line	Eligibility of Declining Balance	Eligibility of Sum of Years Digits	
New Machinery	(Yrs.) 10	Method: Yes, if 6 yrs. or more life. Basis: cash only.	Method: Yes, if 2 yrs. or more life. Basis: Cash plus undepreciated balance, less 20% additional 1st year, if taken, less salvage.	Method: Yes, if 3 yrs. or more life. Limited to 200% of straight line rate. Basis: Cash & undepreciated balance of trade, less 20% additional, if taken, salvage not deducted.	Method: Yes, if 3 yrs. or more life. Basis: Same as straight line.	Yes Basis: Cash plus undepreciated balance of trade.
Used Machinery	Est. Life	Same as above.	Same as above.	Same as above except limited to 150% of straight line rate.	Not eligible	Yes, Basis: Cash only.
Livestock: Breeding Dairy Horses	3-10	Same as above.	Same as above. Salvage must be used.	Same as above, except limited to 200% of straight line rate. Used 150%	Method: Yes if 3 yrs. or life. Used is not eligible. Basis: Same as straight line	Yes (but not horses.)
Buildings (Not including residential.)	25	Not eligible.	Method: Yes. Basis: Cost less salvage	Limited to 150% of S.L. Used not eligible.	Not eligible	Not eligible
Fence Silos Grain Storage Drain Tile Feed bunks Paved yard Wells	10 20 25 20 15 20 15	Not eligible	Method: Yes	Method: Yes, if 3 yrs. life Limited to 150% of straight line Used is not eligible Basis: Cost.	Not eligible	Yes Basis: Cash plus undepreciated balance of trade.
Groves, Orchards & Vineyards	Est. life	Not eligible	Same as above except depreciation begins with the income producing stage.	Same as above except depreciation begins with the income producing stage.	Not eligible	Yes, but eligible only as marketable products are produced.

TM 2

Method of determining basis of property:	Example
Undepreciated value of trade-in	$1500
+ Cash boot paid	3500
= cost basis	5000
- additional 20% 1st year depreciation (of 3500)	- 700 (20% of $3500)
- any salvage	- 250 ($750 - 10% of cost)
= Basis for regular depreciation (Straight line or sum of years digits methods)	$4050

Salvage:

a. This is estimated remaining value at end of life.

b. May disregard salvage up to 10% of basis on personal property (other than livestock) with useful life of 3 years or more. Salvage value must be established on livestock.

c. With declining balance method salvage is not deducted, but cannot be depreciated below estimated salvage value.

Additional 1st Year Depreciation:

a. Optional but eligible only in first tax year.

b. Eligible property must have at least 6-year life.

c. 20% is maximum allowance.

d. $10,000 cost limit for separate, or $20,000 on joint return.

e. Not allowed on property, purchased or otherwise acquired from your wife, husband, parent, child, or other ancestor, or lineal descendant. Nor is it allowed on property acquired in transactions between certain related partners, partnerships, corporations or stockholders.

STRAIGHT-LINE: Salvage value less than 10% of Cost

EXAMPLE:

A FARMER PURCHASED A USED COMBINE FOR $28,000 ON JANUARY 3RD. IT'S USEFUL LIFE IS 7 YEARS WITH SALVAGE VALUE OF $2,000. CALCULATE THE DEPRECIATION AND REMAINING VALUE FOR EACH YEAR OF ITS USEFUL LIFE.

1.	28,000	COST
	-0-	SALVAGE VALUE
	28,000	TOTAL DEPRECIABLE BALANCE

2. 28,000/7 YEARS = 4,000 ANNUAL DEPRECIATION

YEARS	ANNUAL DEPRECIATION TO RECORD	REMAINING VALUE
1ST	4,000	24,000
2ND	4,000	20,000
3RD	4,000	16,000
4TH	4,000	12,000
5TH	4,000	8,000
6TH	4,000	4,000
7TH	4,000	-0-

PARTIAL YEAR

EXAMPLE:

A FARMER PURCHASED A USED COMBINE FOR $28,000 ON JULY 10. IT'S USEFUL LIFE IS 7 YEARS WITH SALVAGE VALUE OF $2,000. CALCULATE THE DEPRECIATION AND REMAINING VALUE FOR EACH YEAR OF IT'S USEFUL LIFE.

1. 28,000 COST
   -0- SALVAGE VALUE
   28,000 TOTAL DEPRECIABLE BALANCE
2. 28,000/7 YEARS = 4,000 ANNUAL DEPRECIATION
3. 6/12 x 4,000 = 2,000 DEPRECIATION CLAIMED 1ST YEAR

YEARS	ANNUAL DEPRECIATION	REMAINING VALUE
1ST	2,000 (4000 x ½ YEAR)	26,000
2ND	4,000	22,000
3RD	4,000	18,000
4TH	4,000	14,000
5TH	4,000	10,000
6TH	4,000	6,000
7TH	4,000	2,000
8TH (JULY 10)	2,000	-0-

TRADE - IN

EXAMPLE:

TRACTOR C WAS PURCHSED JULY 1ST, SEVEN YEARS AGO, FOR $10,000. IT HAD A USEFUL LIFE OF 10 YEARS AND A SALVAGE VALUE OF $700. IT WAS TRADED ON APRIL 26 OF THIS CURRENT YEAR FOR TRACTOR D ALONG WITH $20,000 CASH "BOOT". TRACTOR D WAS ESTIMATED TO HAVE A USEFUL LIFE OF 7 YEARS AND A SALVAGE VALUE OF $2,000. CALCULATE CURRENT YEARS DEPRECIATION CLAIMED AND REMAINING VALUE OF TRACTOR D AT END OF THE YEAR.

UNRECOVERED COST OF TRACTOR C

---

1. 10,000 COST
   -0- SALVAGE VALUE
   10,000 TOTAL DEPRECIATION

2. $\frac{10,000}{10}$ = 1,000 ANNUAL DEPRECIATION

3.

	DEPRECIATION CLAIMED	REMAINING VALUE
1ST YEAR	$ 500 (1000 x 6/12)	9,500
2ND YEAR	1000	8,500
3RD YEAR	1000	7,500
4TH YEAR	1000	6,500
5TH YEAR	1000	5,500
6TH YEAR	1000	4,500
7TH YEAR (CURRENT YEAR)	333 (1000 x 4/12)	4,167

4,167 UNRECOVERED COST APRIL 26, CURRENT YEAR

TRACTOR D

---

4. 4,167 UNRECOVERED COST OF TRACOTR C
   20,000 BOOT
   24,167 COST OF TRACTOR D
   -0- SALVAGE VALUE
   24,167 TOTAL DEPRECIATION

TRACTOR D

---

5. $\frac{24{,}167}{7}$ = 3,452 ANNUAL DEPRECIATION

6. CURRENT YEAR DEPRECIATION
   8/12 x 3,452 = $2,301

7. 24,167
   -2,301
   21,866 REMAINING VALUE END OF CURRENT YEAR

8. TOTAL DEPRECIATION CLAIMED CURRENT YEAR

2,301	TRACTOR D
+ 333	TRACTOR C
2,634	TOTAL

OVERHAUL OF EQUIPMENT

EXAMPLE:

A FARMER BOUGHT A TRACTOR ON JANUARY 6TH, 2 YEARS AGO FOR 14,000 AT A FARM SALE. IT WAS SET UP FOR 7 YEARS OF USEFUL LIFE WITH NO SALVAGE VALUE. IT TURNED OUT TO HAVE A WARPED HEAD AND CRACKED BLOCK. THE OVERHAUL JOB COST $2,000 AND WAS COMPLETED DECEMBER 28 TWO YEARS LATER. CALCULATE THE VALUE OF THE TRACTOR AT THE END OF 3 YEARS.

UNRECOVERED COST OF TRACTOR

---

1. 14,000 COST
   -0- SALVAGE VALUE
   14,000 DEPRECIATION

2. 14,000/7 YEARS = 2,000 ANNUAL DEPRECIATION

3.

YEAR	DEPRECIATION	REMAINING VALUE
1ST	2,000	12,000
2ND	2,000	10,000

OVERHAUL

---

4. 10,000 UNRECOVERED COST
   +4,000 OVERHAUL COST
   14,000 COST
   -0- SALVAGE VALUE
   14,000 DEPRECIATION

5. $\frac{14,000}{7 \text{ YRS.}} = 2,000$

6. 14,000
   -2,000
   12,000 VALUE END OF 3 YEARS

DOUBLE DECLINING BALANCE METHOD

EXAMPLE:

A FARMER PURCHASED A NEW TRACTOR FOR 24,000 ON JANUARY 10. HE EXPECTS IT TO LAST 10 YEARS WITH AN ESTIMATED SALVAGE OF $1,000. CALCULATE THE DEPRECIATION BY DDB FOR THE FIRST TWO YEARS.

1. $\frac{100\%}{10} = 10\% \times 2 = 20\%$ RATE OF DEPRECIATION

2. 24,000 x 20% = 4,800 DEPRECIATION FIRST YEAR

3. $\begin{array}{r} 24{,}000 \\ -4{,}800 \\ \hline 19{,}200 \end{array}$ REMAINING VALUE END OF THR 1ST YEAR

4. 19,200 x 20% = 3,840 DEPRECIATION SECOND YEAR

5. $\begin{array}{r} 19{,}200 \\ -3{,}840 \\ \hline 15{,}360 \end{array}$ REMAINING VALUE END OF THE 2ND YEAR

6. 15,360 x 20% = 3,072 DEPRECIATION THIRD YEAR

ADDITIONAL FIRST YEAR GUIDELINES

1. THE PROPERTY MUST HAVE A LIFE OF 6 YEARS OR MORE.
2. IT IS APPLIED TO THE TOTAL COST OF SUCH PROPERTIES OF NOT MORE THAN $10,000 FOR A SEPERATE RETURN OR $20,000 FOR A JOINT RETURN.
3. PROPERTY MUST NOT BE ACQUIRED FROM SPOUSE, PARENT, CHILD OR OTHER ANCESTOR OF LINEAL DESCENDENT OR THEIR TRUSTS, CORPORATIONS, PARTNERSHIPS AND ETC...
4. CAN BE APPLIED TO EITHER NEW OR USED PROPERTY.
5. IF PROPERTY IS ACQUIRED THROUGH A TRADE, ONLY THE CASH DIFFERENCE PAID IS SUBJECT TO THIS ADDITIONAL DEPRECIATION.
6. REAL PROPERTY DOES NOT QUALIFY - GRAIN BINS, BUILDINGS, ETC...

ADDITIONAL FIRST YEAR 20% DEPRECIATION

EXAMPLE:

A MACHINE IS PURCHASED FOR $4,900 ON OCTOBER 10. THE SALVAGE VALUE IS ESTIMATED TO BE $300 AT THE END OF ITS USEFUL LIFE (10 YEARS). USING STRAIGHT LINE DEPRECIAITON, WHAT IS THE REMAINING VALUE AT THE END OF THE FIRST YEAR.

1. $4,900 x 20% = 980 ADDITIONAL FIRST YEAR DEPRECIATION

2.

2.	$4,900	COST
	-0-	SALVAGE VALUE
	4,900	
	- 980	ADDITIONAL 1ST YEAR DEPRECIATION
	3,920	STRAIGHT LINE DEPRECIATION

3. $\frac{3,920}{10}$ = 392 ANNUAL DEPRECIATION

4. 3 MONTHS = 3/12 = 1/4 x 392 = $98 (1ST YEAR STRAIGHT LINE DEPRECIATION)

5.	$98	STRAIGHT LINE DEPRECIATION
	+980	1ST YEAR 20% ADDITIONAL
	1,078	TOTAL DEPRECIATION FOR THE 1ST YEAR

6.	4,900	COST
	-1,078	1ST YEAR DEPRECIATION
	3,822	REMAINING VALUE AT THE 1ST AND 2ND YEAR

RECORD KEEPING

UNIT V

ASSIGNMENT SHEET #1: Depreciation Worksheet

You buy a ______________________________ for ______________________

on ____________________. You determined the salvage value after

______________________ years of useful life to be ____________________.

Calculate the depreciation using the ________________________ method.

Also, determine the additional first year depreciation you will get, if any.

RECORD KEEPING

UNIT V

ASSIGNMENT SHEET #2: Inventory of Depreciable Assets

Correctly enter the problems furnished by the instructor in the Depreciation and Investment Board that goes with the Kansas Farm Account Book. Then, enter these totals at the bottom of the page.

19__	Annual Depreciation	Total Machinery Value
Machinery Depreciation Record	$4,000	$24,200
Motorized Equipment Depreciation Record	$5,500	$28,300
Building Depreciation Record	$2,300	$22,000
Breeding Livestock Depreciation Record	$ 200	$20,000

RECORD KEEPING

UNIT V

TEST

1. Define a depreciable asset.

2. Describe depreciation and salvage value.

3. Determine salvage value.

4. List three practices in using depreciation.

   a.

   b.

   c.

5. Work through Straight-Line and Declining Balance methods of depreciation for the following example:

   Combine purchased for $50,000 on January 5th. Estimate useful life of 10 years and no salvage value claimed.

   a. What is the depreciation claimed in the 1st year?

   b. What is the remaining value at the end of three years?

	Straight-Line	Declining Balance
a.	________________________	________________________
b.	________________________	________________________

TEST

6. a. What would be the additional first year depreciation claimed in the example used in Question 5?

b. What is the total depreciation claimed the first year using additional first year and straight-line depreciation methods?

7. List three considerations when determining your depreciation strategy?

a.

b.

c.

RECORD KEEPING

UNIT V

ANSWERS TO TEST

1. An outlay of capital is required to acquire. Also, they are items with depreciation. Items included in this category are power machinery, equipment, purchased livestock, and building and improvements.

2. The wear, tear and obsolescence of property causes a decrease in value referred to as "depreciation." This depreciation in value of capital items (those with a useful life of over one year) is a legitimate tax deductible cost for the owner when the item is used in the trade or business or held for producing income. However, unlike operating costs, the depreciation costs cannot all be reported in one year, but rather a portion of it claimed annually over the life of the item. The depreciation costs for tax deduction purposes are calculated independently of the actual payment procedures. Only that part of the original cost which is not recovered by a trade or sale can be claimed as deductible for tax purposes.

   The cost which is recovered by a trade or sale is referred to as salvage value. Cost minus salvage value equals depreciation.

3. While true salvage value is not known at the time of purchase, it should be estimated in order to determine a realistic amount of depreciation expected during the useful life of the item.

   In determining salvage value, the following should be considered:

   a. Years the item is expected to be used

   b. The expected condition of the item at the end of its useful life

   c. The degree of obsolescence expected during its useful life

   Practices in establishing salvage value

   a. If salvage value is estimated to be 10% or less of the original cost basis (cash cost plus book value of assets traded in), salvage value can be omitted.

ANSWERS TO TEST

b. If salvage value is estimated to be over 10% of the original cost basis, the salvage value should be calculated.

c. With new machinery and equipment, the 10% or over figure is often suggested.

d. With livestock, use "true" salvage value.

e. No salvage value is used on buildings.

4. Any three of the following:

a. Stock-in-trade and land are not depreciable. Land is regarded as permanent and having no measurable useful life.

b. Dirt dams, terraces, drainage ditches, etc., are not depreciable, but may qualify as soil and water conservation expenses.

c. Regular depreciation is allowable for only that portion of the year the asset is owned. (Figure ownership to the nearest whole month).

d. There are several methods allowed by the Internal Revenue Service for reporting depreciation:

1. Straight-line method

2. Declining balance method

3. Sum-of-the-years digits method

e. The methods of reporting depreciation have quite different calculations and often the choice of method is made on the basis of the easiest to calculate. However, the methods are considerable different - for instance, in the speed with which depreciation can be claimed - which in turn affects greatly the financial aspects of the business.

5.	Straight-line	Declining Balance
a.	50,000/10 yrs. = 5,000	50,000 x 20% = 10,000
b.	1st yr. 5,000	10,000
	2nd yr. 5,000	8,000
	3rd yr. 5,000	6,400
	15,000	24,400

ANSWERS TO TEST

$$\begin{array}{r} 50,000 \\ -15,000 \\ \hline 35,000 \end{array} \qquad\qquad \begin{array}{r} 50,000 \\ -24,400 \\ \hline 25,600 \end{array}$$

6. a. 50,000 x 20% = 10,000

   b. $\begin{array}{r} 10,000 \\ +\ 4,000 \\ \hline 14,000 \end{array}$ Add 1st year depreciation

   50,000 - 10,000 add 1st year = 40,000/10 yr.

7. a. Keep depreciation in consideration when making purchases the entire year.

   b. Take advantage of rapid depreciation methods.

   c. Switch from rapid depreciation to straight-line after 5 years.

RECORD KEEPING

UNIT VI

DETERMINING NET WORTH

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to identify various types of assets and liabilities and demonstrate the ability to complete a net worth statement. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Define net worth.
2. Explain the difference between a current asset, an intermediate asset, and a fixed asset.
3. Explain the difference between a current liability, intermediate liability, and a long term liability.
4. Name the three methods of evaluating net worth.
5. Name ratios used to determine liquidity.
6. List the ratios used to determine solvency.
7. Demonstrate ability to correctly complete a net worth statement. (Assignment Sheet #1)

RECORD KEEPING

UNIT VI

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparency
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheet and give to Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Master

   TM 1 - Example Net Worth Statement
4. Assignment Sheet

   #1 - Determining Net Worth
5. Test
6. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agricultural Education Curriculum Materials Service, Ohio State University.
2. Balance Sheet - A Farm Financial Management Tool, Cooperative Extension Service, Kansas State University, Manhattan.

RECORD KEEPING

UNIT VI

INFORMATION SHEET

I. Net Worth (TM 1)

   A. Assets - Liabilities = Net Worth

      or

      Assets = Liabilities + Net Worth

   B. Assets include cash on hand, bank accounts, accounts receivable, feed supplies, livestock, equipment, buildings, land, and other items.

   C. Although each asset may not be completely paid for, its full value is listed.

   D. Unpaid accounts, notes, and mortgages are listed as loans.

   E. The simplest way to describe a net worth statement is to say it is a listing of all the things owned by the farmer placed in one column and a listing of all the things owed by the farmer in another column. The difference between the totals of these two columns is called the net worth.

   F. Sometimes the net worth is a negative figure; in other words, the farm business has more debts than assets.

   G. A net worth statement can be taken from more than one point of view; for example, the farm separate from the home; the individual separate from the farm; and the farm, the home and the person separately.

II. Assets

   A. A current asset is cash or other assets which can be quickly converted into cash in the normal business processes within one year.

      1. The value of current assets may vary greatly over time. Crops may be harvested but held for a better market. Feeder livestock may be purchased or sold, resulting in a continual cash flow of funds into the business and out again.

      2. Current assets are also called liquid or quick assets.

INFORMATION SHEET

B. Intermediate assets are those resources that are used mainly to support farm production.

1. Unlike current assets, they are not expected to be sold in the normal business process.
2. Intermediate assets include machinery, equipment and breeding livestock.

C. Fixed assets have more permanent value.

1. They are needed to produce income, but may not be easily converted to cash.
2. They include land and buildings.

III. Liabilities

A. Current loans are debts payable within a year. When they become due, they are usually paid from cash on hand, sale of current assets, or creating another loan.

B. Intermediate term loans usually are for periods from one through seven years.

1. They are usually for items that have a productive life of more than one period of production.
2. Intermediate term loans consist of notes on machinery and equipment purchases.

C. Long term loans include land contracts and mortgages on land and farm improvements. Portions of intermediate and long term loans that are due within 12 months are current loans, because they are due in the present year of business.

IV. Methods of Evaluating Net Worth

A. Compare previous years

B. Compare with other farms

C. Ratios

V. Liquidity Ratios

A. Current Ratio $= \frac{\text{current loans}}{\text{current assets}}$

INFORMATION SHEET

B. Working Ratio = $\frac{\text{current + intermediate loans}}{\text{current + intermediate assets}}$

VI. Solvency Ratios

A. Total Ratio = $\frac{\text{total loans}}{\text{total assets}}$

B. Debt to Worth = $\frac{\text{total loans}}{\text{net worth}}$

Example Net Worth Statement

NAME ____________________ MAJOR ENTERPRISES ____________________

ADDRESS ____________________ STATEMENT DATE ____________________

FARM ASSETS

CURRENT

Cash on Hand................ (1) $ —
Cash on Deposit in Bank..... (2) 2,000
Accounts Receivable......... (3) -
Notes Receivable............ (4) -
Livestock................... (5) 29,000
Crops Held for Sale & Feed.. (6) 22,000
Fertilizer & Supplies on Hand....................... (7) 2,000
Other (Specify)............. (8) -
TOTAL CURRENT FARM ASSETS (Add lines 1-8)... (9) $ 55,000

INTERMEDIATE

Autos and Trucks........... (10) $ 5,400
Machinery & Equipment...... (11) 27,500
Other (Specify)............ (12) -
TOTAL INTERMEDIATE FARM ASSETS (Add lines 10-12) (13) $ 32,900

LONG TERM

Farmland................... (14) $ 120,000
Farm Improvement........... (15) 15,000
Other (Specify)............ (16) -
TOTAL LONG TERM FARM ASSETS (Add lines 14-16) (17) $ 135,000
TOTAL FARM ASSETS (Add lines 9,13 and 17) (18) $ 222,900
TOTAL NON-FARM ASSETS.... (19) $ 20,000
TOTAL FARM & NON-FARM ASSETS (Add lines 18,19) (20) $ 242,900

FARM LOANS

CURRENT

Notes Payable................ (21) $ 22,000
Accounts Payable............. (22) -
Portion of Intermediate-Term Debt Due Within 12 Months... (23) 2,000
Portion of Long-Term Debt Due Within 12 Months............ (24) 4,000
Rent, Taxes, and Interest Due and Unpaid.............. (25) -
Other Debt Due Within 12 Months...................... (26) -
TOTAL CURRENT FARM LOANS (Add lines 21-26) (27) $ 28,000

INTERMEDIATE

Notes Payable (Maturities from 1 to 7 years for other than seasonal needs-less portion due within 12 months).................... (28) $ 3,200
Other (Specify)............. (29) -
TOTAL INTERMEDIATE FARM LOANS (Add lines 28 & 29). (30) $ 3,200

LONG TERM

Mortgages on Farm Real Estate (Less portion applied to current)................. (31) $ 55,500
Mortgages on Other Real Estate (Less portion applied to current loans)........... (32) -
Other (Specify)............. (33) -
TOTAL LONG-TERM FARM LOANS (Add lines 31-33)... (34) $ 55,500
TOTAL FARM LOANS (Add lines 27, 30, and 34)........... (35) $ 86,700
NET FARM WORTH (Assets--Loans) (Line 18-line 35).. (36) $ 136,200

SE U6-7a

FARM LOANS

TOTAL FARM LOANS & NET WORTH (Add lines 35 & 36) (37) $ 222,900

TOTAL NON-FARM LOANS...... (38) $ –

TOTAL FARM & NON-FARM LOANS (Add lines 35 & 38) (39) $ 86,700

TOTAL FARM & NON-FARM NET WORTH (Line 20 - line 39)................ (40) $ 156,200

TOTAL FARM & NON-FARM LOANS & NET WORTH (Add lines 39 and 40).... (41) $ 242,900

RECORD KEEPING

UNIT VI

ASSIGNMENT SHEET #1: Determining Net Worth

Complete the Balance Sheet - Net Worth Statement on page 16 of the Kansas Farm Account Book using the information from the Kansas Farm Account Problem.

Net worth statement

NAME ______________________________

MAJOR ENTERPRISES ______________________

ADDRESS ______________________________

STATEMENT DATE _________________________

FARM ASSETS

CURRENT

Cash on Hand................ (1) $ ________
Cash on Deposit in Bank..... (2) ________
Accounts Receivable......... (3) ________
Notes Receivable............ (4) ________
Livestock................... (5) ________
Crops Held for Sale & Feed.. (6) ________
Fertilizer & Supplies on Hand...................... (7) ________
Other (Specify)............. (8) ________
TOTAL CURRENT FARM ASSETS (Add lines 1-8)... (9) $ ________

INTERMEDIATE

Autos and Trucks........... (10) $ ________
Machinery & Equipment...... (11) ________
Other (Specify)............ (12) ________
TOTAL INTERMEDIATE FARM ASSETS (Add lines 10-12) (13) ________

LONG TERM

Farmland................... (14) $ ________
Farm Improvement........... (15) ________
Other (Specify)............ (16) ________
TOTAL LONG TERM FARM ASSETS (Add lines 14-16) (17) $ ________
TOTAL FARM ASSETS (Add lines 9,13, and 17) (18) $ ________
TOTAL NON-FARM ASSETS.... (19) $ ________
TOTAL FARM & NON-FARM ASSETS (Add lines 18,19) (20) $ ________

FARM LOANS

CURRENT

Notes Payable.............. (21) $ ________
Accounts Payable........... (22) ________
Portion of Intermediate-Term Debt Due Within 12 Months.................... (23) ________
Portion of Long-Term Debt Due Within 12 Months...... (24) ________
Rent, Taxes, and Interest Due and Unpaid............ (25) ________
Other Debt Due Within 12 Months.................... (26) ________
TOTAL CURRENT FARM LOANS (Add lines 21-26). (27) $ ________

INTERMEDIATE

Notes Payable (Maturities from 1 to 7 years for other than seasonal needs-less portion due within 12 months).................. (28) $ ________
Other (Specify)............ (29) ________
TOTAL INTERMEDIATE FARM LOANS (Add lines 28 & 29) (30) $ ________

LONG TERM

Mortgages on Farm Real Estate (Less portion applied to current).................. (31) $ ________
Mortgages on Other Real Estate (Less portion applied to current loans). (32) ________
Other (Specify)............ (33) ________
TOTAL LONG-TERM FARM LOANS (Add lines 31-33). (34) $ ________

SE U6-9a

FARM LOANS

TOTAL FARM LOANS (Add lines 27,30,34)... (35)$ ____________

NET FARM WORTH (Assets--Loans) (Line 18-line 35)(36)$ ____________

TOTAL FARM LOANS & NET WORTH (Add lines 35 &36)(37)$ ____________

TOTAL NON-FARM LOANS.... (38)$ ____________

TOTAL FARM & NON-FARM LOANS (Add lines 35 &38)(39)$ ____________

TOTAL FARM & NON-FARM NET WORTH (Line 20 - line 39)............... (40)$ ____________

TOTAL FARM & NON-FARM LOANS & NET WORTH (Add lines 39 and 40).. (41)$ ____________

RECORD KEEPING

UNIT VI

TEST

1. Define net worth.

2. Describe difference between current, intermediate, and fixed assets.

3. Explain difference between current, intermediate, and long term liability.

4. Name three ways of evaluating net worth.

5. Name ratios used to determine liquidity.

6. List the ratios used to determine solvency.

7. Complete sample Net Worth Statement given by Instructor. (Assignment Sheet #1)

RECORD KEEPING

UNIT VI

ANSWERS TO TEST

1. Assets minus liabilities = Net Worth

2. A current asset is cash or other assets which can be quickly converted into cash in the normal business processes within one year.

   A. The value of current assets may vary greatly over time. Crops may be harvested but held for a better market. Feeder livestock may be purchased or sold, resulting in a continual cash flow of funds into the business and out again.

   B. Current assets are also called liquid or quick assets.

   Intermediate assets are those resources that are used mainly to support farm production.

   A. Unlike current assets, they are not expected to be sold in the normal business process.

   B. Intermediate assets include machinery and equipment.

   Fixed assets have more permanent value.

   A. They are needed to produce income, but may not be easily converted to cash.

   B. They include land and buildings.

3. A. Current loans are debts payable within a year. When they become due, they are usually paid from cash on hand, sale of current assets, or creating another loan.

   B. Intermediate term loans usually are for periods from one through seven years.

      1) They are usually for items that have a productive life of more than one period of production.

      2) Intermediate term loans consist of notes on machinery and equipment purchases.

ANSWERS TO TEST

C. Long term loans include land contracts and mortgages on land and farm improvements. Portions of intermediate and long term loans that are due within 12 months are current loans, because they are due in the present year of business.

4. A. Compare previous years

   B. Compare with other farms

   C. Ratios

5. A. Current Ratio = $\frac{\text{current loans}}{\text{current assets}}$

   B. Working Ratio = $\frac{\text{current + intermediate loans}}{\text{current + intermediate assets}}$

6. A. Total Ratio = $\frac{\text{total loans}}{\text{total assets}}$

   B. Debt to Worth = $\frac{\text{total loans}}{\text{net worth}}$

7. Complete Assignment Sheet #1 to the satisfaction of the Instructor.

RECORD KEEPING

UNIT VII

NET INCOME ON ACCRUAL BASIS

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to compute the net farm income on the accrual basis and understand the uses of the Net Farm Income page. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Define what an Income Statement is.
2. List the two ways of computing Net Farm Income.
3. List the four components of an Income Statement using the accrual system.
4. List the type of Income Statement used for farm analysis.
5. List three ways of analyzing the Income Statement.
6. Determine the Net Farm Income on Accrual basis for case farm and the Net Farm Income on Accrual basis for student operation. (Assignment Sheet #1)

RECORD KEEPING

UNIT VII

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparency
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheet and give to Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Master

   TM 1 - Example Income Statement
4. Assignment Sheet

   #1 - Compute Net Farm Income
5. Test
6. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. "Income Statement - A Farm Financial Management Tool," Kansas State University Management Guide MF 294, Kansas State University, Manhattan.

RECORD KEEPING

UNIT VII

INFORMATION SHEET

I. Income Statement - A financial statement that measures the success of a business for a period of time in terms of net income.

II. Types of Net Farm Income

- A. Cash
  - 1. Difference between cash farm income and cash operating expenses, depreciation, and purchased livestock
  - 2. Equivalent of tax reporting - 95% to 98% of all farms use this method for tax reporting
- B. Accrual
  - 1. Same as cash except you do not subtract livestock purchases. Instead, you include total inventory changes from first of year to end of year
  - 2. Only way to get accurate information for farm analysis

III. Components

- A. Farm Business Receipts
- B. Change in inventory value of feed, supplies, grain, and livestock
- C. Farm operating expenses
- D. Depreciation

IV. Method Used for Farm Analysis - To get true picture to what is happening, you need to compute on accrual method

V. Analysis of Income Statement (TM 1)

- A. Over a period of years
- B. Compare on similar farms
- C. Ratios

INFORMATION SHEET

1. Net Income to Gross Income = Net Income/ Gross Income
2. Net Income to Value of Farm Production = Net Income/ Value of Farm Production

Example Income Statement of a Farm Business

(Accrual or Inventory Basis)
Jan. 1 to Dec. 31

FARM BUSINESS RECEIPTS

Livestock Sales	(1A)	$80,740		
Less Livestock Purchases	(1B)	13,065		
Net Livestock Sales	(1)		67,675	
Crop Sales	(2)		12,490	
Agricultural Program Payments	(3)		4,260	
Other Receipts	(4)		2,175	
Total Receipts (Add lines 1 thru 4)	(5)		86,600	
Change in Inventory Value of feed, supplies, grain and livestock ±	(6)		1,900	
GROSS FARM INCOME (line 5 ± Line 6)	(7)			$88,500

FARM OPERATING EXPENSES

Labor Hired	(8)	2,560
Equipment and Machinery Repairs	(9)	5,470
Interest	(10)	8,545
Cash Rent	(11)	3,870
Feed Purchased	(12)	18,800
Crop Expense, Seed, Etc.	(13)	2,765
Fertilizer and Lime	(14)	4,150
Machine Hire	(15)	1,285
Livestock Expenses	(16)	3,305
Gasoline, Fuel and Oil	(17)	4,460
Real and Personal Taxes	(18)	2,250
General Insurance	(19)	450
Utilities	(20)	540
Conservation Expense	(21)	680
Farm Org. Fees, Publications, Etc.	(22)	585
Total Oper. Exp. (Add Lines 8 thru 22)	(23)	$59,715

DEPRECIATION EXPENSES

Machinery and Equipment	(24)	$ 2,725
Motorized Equipment	(25)	3,000
Buildings	(26)	940
Other Depreciation.	(27)	--
Total Deprec. Exp. (Add lines 24-27).	(28)	6,665
TOTAL FARM EXPENSES (Add lines 23 & 28)	(29)	$66,380
NET FARM INCOME (Line 7 - line 29)	(30)	22,120

RECORD KEEPING

UNIT VII

ASSIGNMENT SHEET #1: Compute Net Farm Income

Complete the Net Farm Income computed on accrual basis, page 15 of the Kansas Farm Account Book using the information previously entered and the additional information provided below.

Farm Share of Total Cash Expense

Line 31	75%
Line 33	60%

Line	Crop Share Percent
17	50%
18	75%
19	50%
20	50%
21	100%
24	100%
26	100%
27	75%
30	50%
31	50%
33	50%
34	50%
35	75%
36	75%
37	50%

RECORD KEEPING

UNIT VII

TEST

1. Define what an Income Statement is.

2. List two ways of computing Net Farm Income.

3. List four components of an Income Statement using the accrual method.

4. What type would you use for true farm analysis?

5. List two ways of analyzing the income statement.

6. Determine net farm income for the case farm. (Assignment Sheet #1)

RECORD KEEPING

UNIT VII

ANSWERS TO TEST

1. Income Statement - A financial statement that measures the success of a business for a period of time in terms of net income

2. a. Cash

   b. Accrual

3. a. Farm Business Receipts

   b. Change in inventory value of feed, supplies, grain, and livestock

   c. Farm operating expenses

   d. Depreciation

4. Accrual Method

5. a. Net Income to Gross Income = Net Income/Gross Income

   b. Net Income to Value of Farm Production = Net Income/Value of Farm Production

6. Complete Assignment Sheet #1 to the satisfaction of the Instructor

RECORD ANALYSIS

UNIT I

CROP ENTERPRISE ANALYSIS

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to analyze the crop enterprise and assess its profitability, compare it to other similar crop enterprise units, and formulate management plans for the future. The objective will be considered achieved by completion of the assignment sheets and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms and definitions associated with crop enterprise analysis.
2. Calculate the gross income - net income ratio for the wheat enterprise. (Assignment Sheet #1)
3. Calculate the net return to management for the wheat enterprise. (Assignment Sheet #1)
4. Calculate the net return to labor and management for the wheat enterprise. (Assignment Sheet #1)
5. Calculate the net return to land, labor and management for each crop enterprise. (Assignment Sheet #1)
6. Calculate total expense per unit of production for the wheat enterprise. (Assignment Sheet #1)
7. Calculate the gross income per unit of production for the wheat enterprise. (Assignment Sheet #1)
8. Analyze and compare these profitability analysis figures (2 through 7) with those of comparable standard crop enterprise units. (Assignment Sheet #1)

RECORD ANALYSIS

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Complete Assignment Sheet by adding local and state Farm Management Summary and Analysis Report data
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Familiarize students with the Kansas Farm Management Summary and Analysis Report
7. Demonstrate procedures for working problems contained in Assignment Sheet
8. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Demonstrate procedures for working problems contained in Assignment Sheet
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets

INSTRUCTIONAL MATERIALS

3. Assignment Sheet
   #1 - Crop Enterprise Analysis
4. Answers to Assignment Sheet
5. Test
6. Answers to Test

References:

1. Kansas Farm Management State Summary and Analysis Report, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

2. Kansas Farm Management Handbook, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

3. Kansas Farm Account Book, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

4. K-Mar - 105 Year End Business and Enterprise Analysis Printout Section 23, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

5. "Comparing Production Costs for Economic Decision Making," Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

6. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service.

RECORD ANALYSIS

UNIT 1

INFORMATION SHEET

I. Terms and Definitions

A. Gross Income to Net Income Ratio - A relationship between these two income figures with the difference being the expenses and depreciation allowances for the enterprise. A narrow ratio generally indicates an efficient operation, and a wider ratio indicates a less efficient operation. Both gross and net income should be made as large as possible. (Gross Income ÷ Net Income = Ratio)
(Example: $53,425 ÷ $19,674 = 2.72 to 1 ratio)

B. Net Return to Management - The net return remaining after all the fixed and variable costs, including land and labor costs, have been deducted from the enterprise's gross income. This figure should be made as large as possible. (Gross Income - fixed costs - variable costs - land costs - labor costs = Net Return to Management)
(Example: $53,425 - $11,640 - $22,111 - $7,924 - $6,397 = $5,353)

C. Net Return to Labor and Management - The net return remaining after all the fixed and variable costs, including land costs, have been deducted from the enterprise's gross income. This figure should be made as large as possible. (Gross income - fixed costs - variable costs - land costs = Net Return to Labor and Management) (Note: Excluding labor costs)
(Example: $53,235 - $11,640 - $22,111 - $7,924 = $11,750)

D. Net Return to Land, Labor, and Management - The net return remaining after all the fixed and variable costs have been deducted from the enterprise's gross income. This figure should be made as large as possible. (Gross Income - fixed costs - variable costs = Net Return to Land, Labor and Management)
(Note: Excluding land and labor costs)
(Example: $53,425 - $11,640 - $22,111 = $19,674)

E. Total Expense per Unit of Production - All direct production costs the farm operator used in producing the crop, divided by the number of units (bushels, pounds, tons) produced. This value does not include production costs paid by a landlord, or the operator's labor, but does include all fixed costs and the land charge. This figure should be kept as small as possible, without limiting efficiency.
(Total expenses ÷ units of production = Total Expenses/Unit of Production) (Example: $48,072 ÷ 20,063 bushels = $2.40 Total Expenses/ Unit of Wheat)

INFORMATION SHEET

F. Gross Income Per Unit of Production - The gross income of the crop enterprise divided by the number of units produced. This figure should be made as large as possible. (Gross Income ÷ Units of Production = Gross Income/Unit of Production)

G. Profitability Analysis Figures - Number totals, which when analyzed individually and as a group, and when compared to similar data from similar standard crop enterprises, will indicate the relative success or failure of the crop enterprises.

H. Comparable Standard Crop Enterprise Unit - A crop farming operation which is producing the same grain or forage crop, utilizing a similar number of acres, with similar farming practices and in equivalent geographical environment.

I. Return per $100 Invested - A measure of the relative profitability of a particular crop enterprise. The crop enterprise's gross income divided by the number of dollars invested as total expense, multiplied by 100. This figure should be made as large as possible. (Crop enterprise gross income ÷ total expense x 100 = Crop Enterprise return per $100 invested) (Example: $53,425 ÷ $28,072 x 100 = $111.14 crop enterprise return per $100 invested.)

RECORD ANALYSIS

UNIT I

ASSIGNMENT SHEET #1: Crop Enterprise Analysis

Note: Use information on page SF U1-8. See definitions on pages SF U1-4, SF U1-5.

1.a. Gross Income to Net Income Ratio:

Col. 1: Gross Income ______________ ÷ Net Income ______________ =

__________ : 1 Ratio

2.a. Net Return to Management:

Col. 1: Gross Income ______________ - Fixed costs ______________ -

Variable costs ______________ = ______________

b. Unit cost per bushel for Net Return to Management:

Col. 2: Gross Income ______________ - Fixed costs ______________ -

Variable costs ______________ = ______________

c. Unit cost per acre for Net Return to Management:

Col. 3: Gross Income ______________ - Fixed costs ______________ -

Variable costs ______________ = ______________

3.a. Net Return to Labor and Management:

Gross Income ______________ - Fixed costs ______________ - Variable

costs ______________ = ______________ (Note: Excluding labor costs)

b. Col. 2: Gross Income ______________ - Fixed costs ______________ -

Variable costs ______________ = ______________

c. Col. 3: Gross Income ______________ - Fixed costs ______________ -

Variable costs ______________ = ______________

ASSIGNMENT SHEET #1

4.a. Net Return to Land, Labor, and Management:

Gross Income______________ - Fixed costs______________ - Variable costs______________ = ______________ (Note: Excluding land and labor costs)

b. Col. 2: Gross Income______________ - Fixed costs______________ - Variable costs______________ = ______________

c. Col. 3: Gross Income______________ - Fixed costs______________ - Variable costs______________ = ______________

5.a. Total Expense per Unit of Production:

Total Expenses______________ ÷ Units of Production______________ = ______________

6.a. Gross Income per Unit of Production:

Gross Income______________ ÷ Units of Production______________ = ______________

ASSIGNMENT SHEET #1: Crop Enterprise Analysis

Kansas Farm Acct. Book Pg. #

Enterprise: Wheat

	Production Year Dollars	Dollars Per Bu.,Lb.,Ton	Dollars Per Acre	Area Farm Mgt. Aver. Standard	Dollars Per Bu.,Lb.,Ton	Dollars Per Acre
Total Yield: 8,818 bu. Crop Acres: 300. Yield/Acre: 29.39						
INCOME:						
Crop-grain or forage	22 0 4500	250	7 3 48	48 15 1 20	2 40	7 1 12
Patronage Refunds	2 1 74 00	25	7 25	438 99	02	66
Gas Tax Refunds				1 058 50	05	1 56
Miscellaneous Income	8 42 16	09	2 81			
Other Income						
Government Payments				3 77 6 75	19	5 58
Gross Income	25 0 61 16	2 84	8 3 53	53 425 44	2 66	78 92
EXPENSE:						
Seed, Crop Insurance	14 5772	17	486	3 3 6 455	17	497
Fertilizer, Lime	43 5685	49	1 452	80 8 934	40	1195
Herbicide	6 1111	07	204	6 850	01	10
Insecticide						
Machine Hire	28550	03	95	1 5 9310	08	2 35
Repairs, Tools	23 2 254	26	774	29 4 608	15	435
Fuel, Oil, (Irrig.)	2 53488	29	845	28 5146	14	4 21
Utilities, (Irrig.)	15 309	02	51	4 4 438	02	66
Hired Labor	9 0925	10	303	1 0 4471	05	154
Personal Prop. Taxes	2 5800	03	86	7 0 129	04	104
Interest Paid	11 3428	13	378	1 2 4 692	06	184
Farm Orig. Fees, etc.	42 840	05	143	2 6462	01	39
Insurance	2 0785	02	69	2 8 581	01	42
Auto Expense				2 54 47	01	38
Total Variable Expenses	14 65 947	166	4 886	23 1 1 521	115	3 420
Leased Equipment						
Real Estate Taxes	665 38	07	222	8 1 753	04	1 21
Depreciation	4 27 6 20	48	1 425	8 1 4 790	41	1 203
Unpaid Operator Labor	9 7 500	11	325	5 3 5 294	27	791
Interest Charge				26 7 491	13	395
Land Charge	10 4 561	12	348	7 9 2 422	40	1 170
Total Fixed Expenses	69 6 219	78	23 20	2 49 1 750	125	3 680
Total Expenses	2 16 2 166			4 80 7 271	240	71 00
NET INCOME:	63 6 936	72	21 23	1 96 7 4 60	98	2 906
GROSS: NET INCOME RATIO				2 7 : 1		
NET RETURN TO MGMT.				5 3 5 2 73	26	7 92
NET RETURN TO LABOR,MGT.				1 1 7 5 038	59	17 36
NET RETURN TO LAND,LABOR MGMT.				1 96 7 4 60	98	2 906
TOTAL EXPENSE/UNIT PROD.					240	7 100
RETURN/$100 INVEST.				1 1 1 14		

RECORD ANALYSIS

UNIT I

ANSWERS TO ASSIGNMENT SHEET

Note: See definitions on pages SF U1-4, SF U1-5.

1.a. Gross Income to Net Income Ratio:

Col. 1: Gross Income $25,061.16 + Net Income $6,369.36 =

3.94 : 1 Ratio

2.a. Net Return to Management:

Col. 1: Gross Income $25,061.16 - Fixed costs $6,962.19 - Variable costs $14,659.47 = $3,439.50.

b. Unit cost per bushel for Net Return to Management:

Col. 2: Gross Income $2.84 - Fixed costs $.78 - Variable costs $1.66 = $.40

c. Unit Cost per acre for Net Return to Management:

Col. 3: Gross Income $83.53 - Fixed costs $23.20 - Variable costs $48.86 = $11.47

3.a. Net Return to Labor and Management:

Gross Income $25,061.16 - Fixed costs $5,987.19 - Variable costs $13,750.22 = $5,323.75 (Note: Excluding labor costs)

b. Col. 2: Gross Income $2.84 - Fixed costs $.67 - Variable costs $1.56 = $.61

c. Col. 3: Gross Income $83.53 - Fixed costs $19.95 - Variable costs $45.83 = $17.75

ANSWERS TO ASSIGNMENT SHEET

4.a. Net Return to Land, Labor, and Management:

Gross Income $25,061.16 - Fixed costs $4,941.58 - Variable costs $13,750.22 = $6,369.36 (Note: Excluding land and labor costs)

b. Col. 2: Gross Income $2.84 - Fixed costs $.55 - Variable costs $1.56 = $.73

c. Col. 3: Gross Income $83.53 - Fixed costs $16.47 - Variable costs $45.83 = $21.23

5.a. Total Expense per Unit of Production:

Total Expenses $21,621.66 ÷ Units of Production 8,818 = $2.45

6.a. Gross Income per Unit of Production:

Gross Income $25,061.16 ÷ Units of Production 8,818 = $2.84

RECORD ANALYSIS

UNIT I

TEST

1. Match the terms on the right to their proper definitions.

____a. A relationship between these two income figures with the difference being the expenses and depreciation allowance for the enterprise.

____b. A measure of the relative profitability of a particular crop enterprise. The crop enterprise gross income divided by the number of dollars invested as total expense, multiplied by 100. This figure should be made as large as possible.

____c. The net return remaining after all the fixed and variable costs, including land and labor costs, have been deducted from the enterprise's gross income. This figure should be made as large as possible.

____d. A crop farming operation which is producing the same grain or forage crop, utilizing a similar number of acres, with similar farming practices and in an equivalent geographical environment.

____e. The net remaining after all the fixed and variable costs, including land costs have been deducted from the enterprise's gross income. This figure should be made as large as possible.

____f. Number totals, which when analyzed individually and as a group, and when compared to similar data from similar standard crop enterprises, will indicate the relative success or failure of the crop enterprise.

1. Gross income per unit of production
2. Net return to management
3. Profitability analysis figures
4. Gross income:net income ratio
5. Net return to labor & management
6. Total expense per unit of production
7. Comparable standard crop enterpise unit
8. Net return to land, labor & management
9. Return per $100 invested

TEST

____g. The net return remaining after all the fixed and variable costs have been deducted from the enterprise's gross income. This figure should be made as large as possible.

____h. The gross income of the crop enterprise divided by the number of units produced. This figure should be made as large as possible.

____i. All direct production costs which the farm operator used in producing the crop, divided by the number of units produced. This value does not include production costs paid by a landlord, or the operator's labor, but does include all fixed costs and the land charge. This figure should be kept as small as possible, without limiting efficiency.

2. Calculate the gross income to net income ratio if:

Gross Income = $25,061.16

Net Income = $6,369.36

Formula:____

____

Answer: __________ : 1 Ratio

3. Calculate the Net Return to Management if:

Gross Income = $25,061.16

Fixed costs = $6,962.19

Variable costs = $14,659.47

Formula:____

____

Answer: ________________

TEST

4. Calculate the Net Return to Labor and Management if:

Gross Income = $25,061.16

Fixed costs - Labor = $5,987.19

Variable costs - Labor = $13,750.22

Formula:____

____

Answer:________________

5. Calculate the Net Return to Land, Labor, and Management if:

Gross Income = $25,061.16

Fixed costs - Land and Labor costs = $4,941.58

Variable costs - Land and Labor costs = $13,750.22

Formula:____

____

Answer:________________

6. Calculate Total Expense per Unit of Production if:

Total Expenses = $21,621.66

Units of Production = 8,818

Formula:____

____

Answer:________________

7. Calculate the Gross Income per Unit of Production if:

Gross Income = $25,061.16

Units of Production = 8,818

Formula:____

____

Answer:________________

TEST

8. Using the profitability analysis figures listed below and those you calculated in Questions 2 through 7, compare them to determine whether they are Better than Standard or Worse than Standard.

	Area Farm Management Standard	Better than Standard	Worse than Standard
a) Gross to Net Income Ratio	2.7 : 1		
b) Net Return to Management	$535,273		
c) Net Return to Labor and Management	$1,175,038		
d) Net Return to Land, Labor and Management	$1,967,460		
e) Total Expense/Unit of Prod.	$2.40		

RECORD ANALYSIS

UNIT I

ANSWERS TO TEST

1. a. 4
    b. 9
    c. 2
    d. 7
    e. 5
    f. 3
    g. 8
    h. 1
    i. 6

2. Gross Income to Net Income Ratio:

Gross Income $25,061.16 ÷ Net Income $6,369.36 = 3.94 : 1 Ratio

3. Net Return to Management:

Gross Income $25,061.16 - Fixed costs $6,962.19 - Variable costs $14,659.47 = $3,439.50.

4. Net Return to Labor and Management:

Gross Income $25,061.16 - Fixed costs $5,987.19 - Variable costs $13,750.22 = $5,323.75 (Note: Excluding labor costs)

5. Net Return to Land, Labor, and Management:

Gross Income $25,061.16 - Fixed costs $4,941.58 - Variable costs $13,750.22 = $6,369.36 (Note: Excluding land and labor costs)

6. Total Expense per Unit of Production:

Total Expenses $21,621.66 ÷ Units of Production 8,818 = $2.45

ANSWERS TO TEST

7. Gross Income per Unit of Production:

Gross Income $25,061.16 ÷ Units of Production 8,818 = $2.84

8.

	Area Farm Management Standard	Better than Standard	Worse than Standard
a) Gross to Net Income Ratio	2.7 : 1	x	
b) Net Return to Management	$535,273		x
c) Net Return to Labor and Management	$1,175,038		x
d) Net Return to Land, Labor and Management	$1,967,460		x
e) Total Expense/Unit of Prod.	$2.40		x

RECORD ANALYSIS

UNIT II

LIVESTOCK ENTERPRISE ANALYSIS

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to analyze the livestock enterprise and evaluate its profitability, compare it to other similar livestock enterprise units, and create management plans for each livestock enterprise unit for the future. This objective will be considered achieved by completion of the assignment sheet and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms with definitions associated with livestock enterprise analysis.
2. Calculate the gross income to net income ratio for each livestock enterprise. (Assignment Sheet #1)
3. Calculate the net return to management for each livestock enterprise. (Assignment Sheet #2)
4. Calculate the net return to labor and management for each livestock enterprise. (Assignment Sheet #1)
5. Calculate the net return to land, labor and management for each livestock enterprise. (Assignment Sheet #1)
6. Calculate total expense per cwt. of production for each livestock enterprise. (Assignment Sheet #1)
7. Calculate the gross income per cwt. of production for each livestock enterprise. (Assignment Sheet #1)
8. Calculate the feed costs per cwt. for each livestock enterprise. (Assignment Sheet #1)
9. Calculate the non-feed costs per cwt. for each livestock enterprise. (Assignment Sheet #1)
10. Analyze and compare these profitability figures (2 through 9) with those of a comparable standard livestock enterprise unit. (Assignment Sheet #2)

RECORD ANALYSIS

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Complete Assignment Sheet by adding local and state Farm Management Summary and Analysis Report data
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheet
6. Familiarize students with the Kansas Farm Management Summary and Analysis Report
7. Demonstrate procedures for working problems contained in Assignment Sheet
8. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Demonstrate procedures for working problems contained in Assignment Sheet
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information sheet
3. Assignment Sheet

   #1 - Livestock Enterprise Analysis
4. Answers to Assignment Sheet
5. Test
6. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. *Kansas Farm Management State Summary and Analysis Report*, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.
2. *Kansas Farm Management Handbook*, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.
3. *Kansas Farm Account Book*, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.
4. *K-MAR - 105 Year End Business and Enterprise Analysis Printout Section 23*, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.
5. "Comparing Production Costs for Economic Decision Making," Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.
6. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service.

LIVESTOCK ENTERPRISE ANALYSIS

UNIT II

INFORMATION SHEET

I. Terms and Definitions

A. Gross income to net income ratio = (gross income ÷ net income).

B. Net return to management = (gross income - fixed costs - variable costs - land cost - labor costs).

C. Net return to labor and management = (gross income - fixed costs - variable costs - land cost). Excluding labor costs

D. Net return to land, labor and management = (gross income - fixed costs - variable costs). Excluding land and labor costs

E. Total expense per cwt. of production = (total expenses ÷ cwts. of production).

F. Gross income per cwt. of production = (gross income ÷ cwts. of production).

G. Profitability analysis figures - are generally the same type of figures as those studied for the crop enterprise analysis. However, the livestock enterprise analysis figures per unit of production may be of variable comparative size, depending on the enterprise.

H. Comparable standard livestock enterprise unit--a livestock production operation which is producing the same specie and type of livestock utilizing a similar number of head or production units, with similar production practices and in an equivalent geographical environment.

I. Return per $100 invested = (livestock enterprise gross income ÷ total investment) x (100).

J. Feed Costs per cwt. - total grain, forage, silage, feed additives, micro-nutrients, salt, and mineral costs, ÷ the number of total cwts. of livestock produced, (Total feed costs ÷ Total cwts. livestock produced = Feed costs/cwt.)
(Example: $56,202.24 ÷ $2,396.80 cwts. = $23.45)

K. Non-feed costs per cwt. - the total of variable and fixed costs other than feed, including labor, health, marketing, repairs, fuel, utilities, interest, farm organization fees, taxes and depreciation, divided by the number of total cwts. of livestock produced. (Total non-feed costs ÷ Total cwts. livestock produced = Non-feed costs/cwt.)
($22,769.60 ÷ $2,396.08 cwts = $9.50)

RECORD ANALYSIS

UNIT II

ASSIGNMENT SHEET #1: Livestock Enterprise Analysis

Secure figures from information sheet and enterprise handout of swine, sow and litter, and finishing pigs. Place correct answer to problem on bottom of enterprise sheet.

1. Gross income to net income can be determined by: Gross income_________ ÷ net income_________ = Gross income to net income ratio________:________.

2. Net income to management can be determined by taking: Gross income___________ minus fixed costs__________ minus variable costs___________ minus land costs_________ minus labor costs____________ = Net income for management___________.

3. Net return to labor can be determined by taking: Gross income___________ minus fixed costs___________ minus varible costs___________ minus land costs___________ excluding labor costs___________ = Net return to management________________.

4. Net return to Land, Labor and Management can be determined by taking: Gross Income__________ minus fixed costs____________ minus variable costs_____________ and excluding land costs___________ and labor costs______________ = Return to Land and Management_______________.

5. Total expense per cwts. of production can be determined by taking: Total expense___________ ÷ cwts. of production___________ = Total expense per cwts. of production______________.

ASSIGNMENT SHEET #1

6. Gross income per cwts. of production can be determined by taking: Gross income____________ ÷ cwts. of production____________= Gross income per cwts. of production_______________.

7. Feed cost per cwts. can be determined by taking: Total feed cost____________ ÷ total cwts.____________= Feed cost per cwts._______________.

8. Non-feed cost per cwts. can be determined by taking: Total non-feed costs ____________÷ total cwts.________________= Non-feed cost per cwts. _______________.

RECORD ANALYSIS
UNIT II

SF U2-7

Assignment Sheet #1: Livestock Enterprise Analysis

Enterprise: Swine - Sow and Litter - Finished Pigs

Total Yield: 674,100 lbs. # of Prod. Unit:335 litters Yield/Prod. Unit:2,012.24lbs.	Production Year Dollars	Dollars Per Cwt.	Dollars Per Animal Sold	Area Farm Mgt. Aver. Standard	Dollars Per Cwt.	Dollars Per Animal Sold
INCOME:				(160 Prod. Unit=239,680 lbs.)		
Sales - Produced Units	17160000	2545	4443	8975681	3745	9085
Inventory Reduc.	406400		105	782103	326	791
Ending inventory value	10346700	1535	2679	3994250	1667	4043
Gross sales	27913100	4140	7227	13752034	5738	13919
Inventory Purchases	110000	16	28	240468	100	243
Beginning Inventory	8046400	1194	2083	3359712	1402	3401
Gross Purchases	8156400	1210	2111	3600180	1502	3644
Net sale gain	19756700	2930	5116	10151854	4236	10275
Patronage refunds	217400	32	56	98064	41	99
Gas tax refunds				12779	05	13
Other income	17545	03	05			
Gross income	19991645	( )	( )	10262697	4282	10387
EXPENSE:						
Feed - total	13617100	( )	( )	5620224	2345	5689
Vet - medicine - drugs	5160	76	134	128015	53	130
Marketing - breeding	370320	55	96	142650	60	144
Labor hired	963805	143	249	305231	127	309
Fuel - oil	264050	39	68	78539	33	80
Repairs - tools	510380	76	132	264237	110	267
Auto Expense	17040	02	04	18228	08	18
Insurance	199536	30	52	48792	20	49
Utilities	362313	54	94	161852	68	164
Interest + (charge)	788528	117	204	357140	149	361
Taxes - Pers. Prop.	4200	01	01	28565	12	29
Farm Organ. fees	98532	14	26	35613	15	36
Total variable expenses	17711804	2627	4586	7189086	3000	7276
Real Estate tax	39140	06	10	11538	05	12
Depreciation	896670	133	232	464052	194	470
Unpaid operator labor	450000	67	117	232105	97	235
Total fixed expenses	1385810	206	359	707695	295	717
Total Expense	19097614	( )	( )	7896781	3295	7993
NET INCOME:	894031	133				
Gross to net income ratio	( )			3.52 to 1		
Net return to mgmt.	( )	( )	( )	2365916	987	2395
Net return to labor, mgt.	( )	( )	( )	2903252	1211	2939
Net return to land, labor mgmt.	( )	( )	( )	2914790	1216	2950
Total Expense/cwt. prod.	( )			3295		
Return/$100 invested	( )			12996		
Feed Cost/cwt.	( )			2345		
Non-feed cost/cwt.	( )			950		

RECORD ANALYSIS

UNIT II

ANSWERS TO ASSIGNMENT SHEET #1

Secure figures from information sheet and enterprise handout of swine, sow and litter, and finishing pigs. Place correct answer to problem on bottom of enterprise sheet.

1. Gross income to net income can be determined by: Gross income $199,916.45 ÷ net income $8,940.31 = Gross income to net income ratio 2.24 : 1.

2. Net income to management can be determined by taking: Gross income $199,916.45 minus fixed costs $8,966.70 minus variable costs $167,479.99 minus land costs $391.40 minus labor costs $14,138.05 = Net income for management $8,940.31.

3. Net return to labor can be determined by taking: Gross income $199,916.45 minus fixed costs $8,966.70 minus varible costs $167,479.99 minus land costs $391.40 excluding labor costs $9,638.05 and $4,500 = Net return to management $23,078.36.

4. Net return to Land, Labor and Management can be determined by taking: Gross income $199,916.45 minus fixed costs $8,966.70 minus variable costs $167,479.99 excluding land costs $391.40 and labor costs $14,138.05 = Return to Land and Management $23,469.76.

5. Total expense per cwts. of production can be determined be taking: Total expense $190,976.14 ÷ cwts. of production 6,741 = Total expense per cut of production $28.33.

ANSWERS TO ASSIGNMENT SHEET

6. Gross income per cwts. of production can be determined by taking: Gross income $199,916.45 ÷ cwts. of production 6,741 = Gross income per cwts. of production $29.66.

7. Feed cost per cwts. can be determined by taking: Total feed cost $136,171.00 ÷ total cwts. 6,741 = Feed cost per cwts. $20.20.

8. Total non-feed cost per cwts. can be determined by taking: Total non-feed costs $54,805.14 ÷ total cwts. 6,741 = Non-feed cost per cwts. $8.13.

RECORD ANALYSIS

UNIT II

TEST

1. Match the terms on the right to their proper definitions.

____a. The total of variable and fixed costs, other than feed costs, including labor, health, marketing, repairs, fuel, utilities, interest, farm organization fees, taxes, and depreciation, divided by the number of total cwts. of livestock produced.

____b. Generally the same type of figures as those studied for the crop enterprise analysis. However, the livestock enterprise analysis figures per unit of production may be of variable comparative size, depending on the enterprise.

____c. A livestock production operation which is producing the same specie and type of livestock utilizing a similar number of head or production units, with similar production practices and in an equivalent geographical environment.

____d. Gross income ÷ cwts. of production.

____e. Gross income - fixed costs - variable costs.

____f. Total expenses ÷ cwts. of production.

____g. Total grain, forage, silage, feed additives, micro-nutrients, salt, and mineral costs, divided by the number of total cwts. of livestock produced.

____h. Gross income - fixed costs - variable costs - land costs.

____i. Gross income ÷ net income.

____j. Livestock enterprise gross income ÷ total expense x 100.

____k. Gross income - fixed costs - variable costs - land cost - labor costs.

1. Return per $100 invested
2. Gross income per cwt. of production
3. Net return to labor and management
4. Gross income to net income ratio
5. Total expense per cwt. of production
6. Non-feed costs per cwt
7. Net return to management
8. Profitability analysis figures
9. Comparable standard livestock enterprise
10. Net return to land, labor and management
11. Feed costs per cwt

TEST

2. Calculate the Gross Income to Net Income ratio if:

Gross Income = $199,916.45
Net Income = $8,940.31

Formula:____

____

Answer:______________ : 1 Ratio

3. Calculate the Net Income to Management if:

Gross Income = $199,916.45
Fixed Costs = $8,966.70
Variable Costs = $167,479.99
Land Costs = $391.40
Labor Costs = $14,138.05

Formula:____

____

Answer:____

4. Calculate the Net Return to Labor if:

Gross Income = $199,916.45
Fixed Costs = $8,966.70
Variable Costs = $167,479.99
Land Costs = $391.40
Labor Costs = $9,638.05 and $4,500.00

Formula:____

____

Answer:____

5. Calculate the Net Return to Land, Labor and Management if:

Gross Income = $199,916.45
Fixed Costs = $8,966.70
Variable Costs = $167,479.99
Land Costs = $391.40
Labor Costs = $14,138.05

Formula:____

____

Answer:____

TEST

6. Calculate the Total Expense per Cwts. of Production if:

   Total Expense = $190,976.14
   Cwts. of Production = 6,741

   Formula:______________________________

   ____

   Answer:______________________________

7. Calculate Gross Income per Cwts. of Production if:

   Gross Income = $199,916.45
   Cwts. of Production = 6,741

   Formula:______________________________

   ____

   Answer:______________________________

8. Calculate Feed Costs per Cwts. of Production if:

   Total Feed Costs = $136,171.00
   Cwts. of Production = 6,741

   Formula:______________________________

   ____

   Answer:______________________________

9. Calculate Total Non-feed Costs per Cwts. of Production if:

   Total Non-feed costs = $54,805.14
   Cwts. of Production = 6,741

   Formula:______________________________

   ____

   Answer:______________________________

TEST

10. Using the profitability analysis figures listed below and those you calculated in Questions 2 through 9, compare them to determine whether they are Better than Standard or Worse than Standard.

	Area Farm Management Standard	Better than Standard	Worse than Standard
a) Gross to Net Income Ratio	3.52 : 1		
b) Net Return to Management	23,659.16		
c) Net Return to Labor and Management	29,032.52		
d) Net Return to Land, Labor and Management	29,147.90		
e) Total Expense/Cwt. Prod.	32.95		
f) Feed Cost/Cwt.	23.45		
g) Non-feed Cost/Cwt.	9.50		

11. Differentiate between factors which appear as strengths and those that appear as weaknesses in Question 10.

STRENGTHS	WEAKNESSES
a.	a.
b.	b.
c.	c.

RECORD ANALYSIS

UNIT II

ANSWERS TO TEST

1. a. 6
   b. 8
   c. 9
   d. 2
   e. 10
   f. 5
   g. 11
   h. 3
   i. 4
   j. 1
   k. 7

2. Gross Income to Net Income Ratio:
   Gross Income $199,916.45 ÷ Net Income $8,940.31 = 2.24 : 1 Ratio

3. Net Return to Management:
   Gross Income $199,916.45 - Fixed costs $8,966.70 - Variable costs $167,479.99 - Land costs $391.40 - Labor costs $14,138.05 = $8,940.31

4. Net Return to Labor:
   Gross Income $199,916.45 - Fixed costs $8,966.70 - Variable costs $167,479.99 - Land costs $391.40 and excluding Labor costs $9,638.05 and $4,500 = $23,078.36

5. Net Return to Land, Labor, and Management:
   Gross Income $199,916.45 - Fixed costs $8,966.70 - Variable costs $167,479.99 and excluding Land costs $391.40 and Labor costs $14,138.05 = $23,469.76

ANSWERS TO TEST

6. Total Expense per Cwts. of Production:

Total Expense $190,976.14 ÷ Cwts. of Production 6,741 = $28.33

7. Gross Income per Cwts. of Production:

Gross Income $199,916.45 ÷ Cwts. of Production 6,741 = $29.66

8. Feed Costs per Cwts. of Production:

Total Feed costs $136,171.00 ÷ Total Cwts. of Production 6,741 = $20.20

9. Total Non-feed Costs per Cwts. of Production:

Total Non-feed costs $54,805.14 ÷ Cwts. of Production 6,741 = $8.13

10.

	Area Farm Management Standard	Better than Standard	Worse than Standard
a) Gross to Net Income Ratio	3.52 : 1		x
b) Net Return to Management	23,659.16		x
c) Net Return to Labor and Management	29,032.52		x
d) Net Return to Land, Labor and Management	29,147.90		x
e) Total Expense/Cwt. Prod.	32.95	x	
f) Feed Cost/Cwt.	23.45	x	
g) Non-feed Cost/Cwt.	9.50	x	

11. Strengths

a. Total expense/cwt. produced

b. Feed cost/cwt. produced

c. Non-feed cost/cwt. produced

d. Yield/production unit

e. Overall operation efficiency

Weaknesses

a. Price/cwt. of swine sold, marketing method.

b. Gross to net income ratio

c. Net return to mgmt.

d. Net return to labor, mgmt.

e. Net return to land, labor, management

f. Return/$100 invested

RECORD ANALYSIS

UNIT III

MACHINERY AND BUILDING ENTERPRISE ANALYSIS

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to analyze the machinery and building enterprise, appraise its profitability, and compare it to other similar machinery or building enterprise units. The students will formulate management plans for each machinery and building enterprise for the future. The objective will be considered achieved by completing the assignment sheets and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms with definitions associated with machinery and building enterprise analysis.
2. Calculate the machinery and building enterprise investment costs for each machinery and building enterprise.
3. Calculate the net return to management per $1,000 of investment in machinery and building for each machinery and building enterprise. (Assignment Sheet #1 and #2)
4. Calculate the net return to labor and management per $1,000 of investment in machinery and building for each machinery and building enterprise. (Assignment #1 and #2)
5. Calculate the net return to land, labor and management per $1,000 of investment in machinery and building for each machinery and building enterprise. (Assignment Sheet #1 and #2)
6. Calculate the gross income per $1,000 of investment in machinery and building for each machinery and building enterprise. (Assignment Sheet #1 and #2)
7. Calculate the machinery and building investment per unit of production for each machinery and building enterprise. (Assignment Sheet #1 and #2)
8. Compare these profitability analysis figures (2 through 7) with those of comparable standard machinery and building units. (Assignment Sheet #1 and #2)

RECORD ANALYSIS

UNIT III

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Complete Assignment Sheets #1 and #2 by adding local and/or state Farm Management Summary and Analysis Report data for a representative enterprise
5. Discuss Terminal and Specific Objectives
6. Discuss Information and Assignment Sheets
7. Familiarize students with the Kansas Farm Management Summary and Analysis Report
8. Demonstrate procedures for working problems contained in Assignment Sheets
9. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Demonstrate procedures for working problems contained in Assignment Sheets
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets

INSTRUCTIONAL MATERIALS

3. Assignment Sheets

   #1 - Machinery Enterprise Analysis

   #2 - Analyzing an Example Building Enterprise

4. Answers to Assignment Sheets

5. Test

6. Answers to Test

References:

1. Kansas Farm Management State Summary and Analysis Report, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

2. Kansas Farm Management Handbook, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

3. Kansas Farm Account Book, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

4. "K-Mar-105 Year End Business and Enterprise Analysis Printout Section 23", Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.

5. "Comparing Production Costs for Economic Decision Making", Department of Economic Cooperative Extension Service, Kansas State University, Manhattan, KS.

6. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service.

RECORD ANALYSIS

UNIT III

INFORMATION SHEET

I. Terms and Definitions

A. Machinery Enterprise - all the items of equipment or machinery and the expenses and receipts involved in producing a particular type of crop or livestock product.

(Examples: Wheat Machinery Enterprise or Swine Machinery Enterprise)

B. Machinery Investment Costs - includes both fixed costs and variable costs related to machinery ownership and operation, such as annual depreciation, interest, tax, insurance, housing, fuel, lubrication, repairs, and labor. Also can be referred to as machinery investment. (MI)

(machinery investment costs = machinery fixed costs + machinery variable costs)

C. Net Return to Management per $1000 of Machinery Investment - the return to management figure divided by the machinery investment costs, multiplied by 1000 for any given enterprise. (NRM/$1000 MI)

(Net Return to Management ÷ machinery investment x 1000 = net return to management per $1000 of machinery investment)

D. Net Return to Labor and Management per $1000 of Machinery Investment - the return to labor and management figure divided by the machinery investment costs, multiplied by 1000, for any given enterprise. (NRLM/$1000 MI)

(Return to Labor and Management ÷ machinery investment x 1000 = Net Return to Labor and Management per $1000 of machinery investment)

E. Net Return to Land, Labor and Management per $1000 of Machinery Investment - the return to land, labor and management figure divided by the machinery investment costs, multiplied by 1000, for any given enterprise. (NRLLM/$1000 MI)

(Net Return to Land, Labor and Management ÷ machinery investment x 1000 = Net Return to Land, Labor and Management per $1000 of machinery investment.)

F. Gross Income per $1000 of Machinery Investment - the gross income figure divided by the machinery investment costs, multiplied by 1000 for any given enterprise. (GI/$1000 MI)

INFORMATION SHEET

(Gross Income ÷ Machinery Investment x 1000 = Gross Income per $1000 of machinery investment.)

G. Machinery Investment per Unit of Production - the machinery investment figure divided by the number of acres, number of head or other unit of production figures. (MI/UP)

(Machinery Investment ÷ Units of Production = Machinery Investment per unit of production)

H. Building Enterprise - all the buildings and the expenses and receipts associated directly with them and involved in producing a particular type of crop or livestock product.

(Examples: Corn Building Enterprise or Cattle Building Enterprise)

I. Building Investment Costs - includes both fixed costs and variable costs related to building construction, maintenance and ownership, such as annual depreciation, interest, tax, insurance, repairs, fuel, labor. Also can be referred to as building investment. (BI)

(Building fixed cost + Building variable costs = BI)

J. Net Return to Management per $1000 of Building Investment - the return to management figure divided by the building investment costs, multiplied by 1000, for any given enterprise. (NRM/$1000 BI)

(Net Return to Management ÷ Building Investment x 1000 = NRM/$1000 BI)

K. Net Return to Labor and Management per $1000 of Building Investment - the return to labor and management figure divided by the building investment costs, multiplied by 1000, for any given enterprise (NRLM/$1000 BI)

(Return to labor and management ÷ Building Investment x 1000 = NRLM/$1000 BI)

L. Net Return to Land, Labor, and Management per $1000 of Building Investment - the return to land, labor and management figure divided by the building investment costs, multiplied by 1000, for any given enterprise. (NRLLM/$1000 BI)

(Net Return to Land, Labor and Management ÷ Building Investment x 1000 = NRLLM/$1000 BI)

INFORMATION SHEET

M. Gross Income per $1000 of Building Investment - the gross income figure divided by the building investment costs, multiplied by 1000, for any given enterprise. (GI/$1000 BI)

(Gross Income ÷ Building Investment x 1000 = GI/$1000 BI)

N. Building Investment per Unit of Production - the building investment figure divided by the number of acres, number of head, other unit of production figures. (BI/UP)

(Building Investment ÷ Units of Production = BI/UP)

O. Profitability Analysis Figures - number totals which when analyzed individually and as a group, and then compared to similar data from similar standard enterprises, will indicate the relative success or failure of the enterprise.

RECORD ANALYSIS

UNIT III

ASSIGNMENT SHEET #1: Machinery Enterprise Analysis

Perform specific objectives #2 through #8 by utilizing steps #1 through #6 below, and additional materials from Enterprise Analysis pages SF U3-11 and SF U3-12.

Machinery Enterprise: Wheat/Swine # of Units: 8,818 Bu/300 Acres
674,100 lbs./335 litters

1. Machinery Investment Costs: (Machinery Investment) (Kansas Farm Account Book expense page entries which pertain to the enterprise being analyzed.)

*Expense Page	$ Crop	$ Livestock
Col. #1	$ 2,000	$ 2,000
Col. #2	6,225	2,075
Col. #4	285	285
Col. #13	4,125	1,375
Col. #14	675	675
Col. #17	300	300
Col. #21	1,500	500
Col. #22	-0-	-0-
Col. #23	2,850	2,850
SUB-TOTAL	$	$

TOTAL Machinery Investment Costs: Crop__________ + Livestock__ __________ = __________ (MI)

2. Net Return to Management per $1,000 of Machinery Investment

*Net Return to Management (Crops__________ + Livestock__________) ÷ Machinery Investment (Calculated in #1 above)__________ X 1,000 = __________ (NRM/$1,000 MI)

3. Net Return to Labor and Management per $1,000 of Machinery Investment:

*Net Return to Labor and Management (Crops__________ + Livestock___ __________) ÷ Machinery Investment__________ X 1,000 = __________ (NRLM/$1,000 MI)

ASSIGNMENT SHEET #1

4. Net Return to Land, Labor, and Management per $1,000 of Machinery Investment:

*Net Return to Land, Labor, and Management (Crops__________ +
Livestock__________) ÷ Machinery Investment__________ X 1,000 =
___________ (NRLLM/$1,000 MI)

5. Gross Income per $1,000 of Machinery Investment:

*Gross Income (Crops__________ + Livestock__________) ÷ Machinery
Investment__________ X 1,000 = ___________ (GI/$1,000 MI)

6. Machinery Investment Per Unit of Production:

Machinery Investment ÷ *acres of enterprise = ________________ (MI/UP)
or
Machinery Investment ÷ *bushels of grain = ________________ (MI/UP)
or
Machinery Investment ÷ *number of litters = ________________ (MI/UP)
or
Machinery Investment ÷ *100 lbs. of meat = ________________ (MI/UP)
or
Machinery Investment ÷ *(other units) = ________________ (MI/UP)

* Information material may be taken from Kansas Farm Account Book on case farm information pages SF U3-11 and SF U3-12 of this unit. Also use information sheets SF U3-4, SF U3-5, and SF U3-6.

RECORD ANALYSIS

UNIT III

ASSIGNMENT SHEET #2: Analyzing an Example Building Enterprise

Perform specific objectives #2 through #8 utilizing steps #1 through #6 below, and additional materials from Enterprise Analysis pages SF U3-11 and SF U3-12.

Building Enterprise: Wheat/Swine # of Units: 674,100 lbs./335 litters
8,818 Bu/300 Acres

1. Building Investment Costs: (Building Investment) (Kansas Farm Account Book expense page entries which pertain to the enterprise being analyzed.)

*Expense Page	$ Crop	$ Livestock
Col. #1	$ 500	$ 500
Col. #3	1,100	1,100
Col. #4	-0-	-0-
Col. #10	1,200	-0-
Col. #13	375	125
Col. #14	675	675
Col. #15	975	975
Col. #21	1,200	400
Col. #22	-0-	-0-
Col. #23	-0-	-0-
SUB-TOTAL		

TOTAL Building Investment Costs: Crop__________ + Livestock____________ = __________ (BI)

2. Net Return to Management per #1,000 of Building Investment:

*Net Return to Management (Crops___________ + Livestock__________) + Building Investment__________ X 1,000 = __________ (NRM/$1,000 BI)

3. Net Return to Labor and Management per $1,000 of Building Investment:

*Net Return to Labor and Management (Crop__________ + Livestock____________) + Building Investment__________ X 1,000 = __________ (NRLM/$1,000 BI)

ASSIGNMENT SHEET #2

4. Net Return to Land, Labor, and Management per $1,000 of Building Investment:

   *Net Return to Land, Labor, and Management (Crops__________ + Livestock__________) ÷ Building Investment__________ X 1,000 = __________ (NRLLM/$1,000 BI)

5. Gross Income per $1,000 of Building Investment:

   *Gross Income (Crops__________ + Livestock__________) ÷ Building Investment__________ X 1,000 = __________ (GI/$1,000 BI)

6. Building Investment per Unit of Production:

   Building Investment ÷ *acres of enterprise = ______________ (BI/UP)
   or
   Building Investment ÷ *bushels of grain = ______________ (BI/UP)
   or
   Building Investment ÷ *number of litters = ______________ (BI/UP)
   or
   Building Investment ÷ *lbs. of meat = ______________ (BI/UP)
   or
   Building Investment ÷ *(other units) = ______________ (BI/UP)

   * Information material may be taken from Kansas Farm Account Book on case farm information pages SF U3-11 and SF U3-12 of this unit. Also use information sheets SF U3-4, SF U3-5, and SF U3-6.

ASSIGNMENT SHEET #1 & #2

SF U3-11

Kansas Farm Acct. Book Pg. #

Enterprise: Wheat	Production Year Dollars	Dollars Per Bu.,Lb.,Ton	Dollars Per Acre	Area Farm Mgt. Aver. Standard	Dollars Per Bu.,Lb.,Ton	Dollars Per Acre
Total Yield: 8,818 bu.						
Crop Acres: 300.						
Yield/Acre: 29.39						
INCOME:						
Crop-grain or forage	22045 00	250	73 48	48151 20	2 40	71 12
Patronage Refunds	2174 00	25	7 25	438 99	02	66
Gas Tax Refunds				1058 50	05	1 56
Miscellaneous Income	842 16	09	2 81			
Other Income						
Government Payments				3776 75	19	5 58
Gross Income	25061 16	2 84	83 53	53425 44	2 66	78 92
EXPENSE:						
Seed, Crop Insurance	145772	17	486	336455	17	497
Fertilizer, Lime	435685	49	1452	808934	40	1195
Herbicide	61111	07	204	6850	01	10
Insecticide						
Machine Hire	28550	03	95	159310	08	235
Repairs, Tools	232254	26	774	294608	15	435
Fuel, Oil, (Irrig.)	253488	29	845	285146	14	421
Utilities, (Irrig.)	15309	02	51	44438	02	66
Hired Labor	90925	10	303	104471	05	154
Personal Prop. Taxes	25800	03	86	70129	04	104
Interest Paid	113428	13	378	124692	06	184
Farm Orig. Fees, etc.	42840	05	143	26462	01	39
Insurance	20785	02	69	28581	01	42
Auto Expense				25447	01	38
Total Variable Expenses	1465947	166	4886	2311521	115	3420
Leased Equipment						
Real Estate Taxes	66538	07	222	81753	04	121
Depreciation	427620	48	1425	814790	41	1203
Unpaid Operator Labor	97500	11	325	535294	27	791
Interest Charge				267491	13	395
Land Charge	104561	12	348	792422	40	1170
Total Fixed Expenses	696219	78	2320	2491750	125	3680
Total Expenses	2162166			4807271	240	7100
NET INCOME:	636936	72	2123	1967460	98	2906
GROSS: NET INCOME RATIO				27:1		
NET RETURN TO MGMT.				535273	26	792
NET RETURN TO LABOR,MGT.				1175038	59	1736
NET RETURN TO LAND,LABOR MGMT.				1967460	98	2906
TOTAL EXPENSE/UNIT PROD.					240	7100
RETURN/$100 INVEST.				11114		

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ASSIGNMENT SHEET #1 & #2

Enterprise: Swine - Sow and Litter - Finished Pigs

Total Yield: 674,100 lbs. # of Prod. Unit:335 litters Yield/Prod. Unit:2,012.241bs.	Production Year Dollars	Dollars Per Cwt.	Dollars Per Animal Sold	Area Farm Mgt. Aver. Standard	Dollars Per Cwt.	Dollars Per Animal Sold
INCOME:				(160 Prod. Unit=239,680 lbs.)		
Sales - Produced Units	17160000	2545	4443	8975681	3745	9085
Inventory Reduc.	406400		105	782103	326	791
Ending inventory value	10346700	1535	2679	3994250	1667	4043
Cross sales	27913100	4140	7227	13752034	5738	13919
Inventory Purchases	110000	16	28	240468	100	243
Beginning Inventory	8046400	1194	2083	3359712	1402	3401
Gross Purchases	8156400	1210	2111	3600180	1502	3644
Net sale gain	19756700	2930	5116	10151854	4236	10275
Patronage refunds	217400	32	56	98064	41	99
Gas tax refunds				12779	05	13
Other income	17545	03	05			
Gross income	19991645	( )	( )	10262697	4282	10387
EXPENSE:						
Feed - total	13617100	( )	( )	5620224	2345	5689
Vet - medicine - drugs	5160	76	134	128015	53	130
Marketing - breeding	370320	55	96	142650	60	144
Labor hired	963805	143	249	305231	127	309
Fuel - oil	264050	39	68	78539	33	80
Repairs - tools	510380	76	132	264237	110	267
Auto Expense	17040	02	04	18228	08	18
Insurance	199536	30	52	48792	20	49
Utilities	362313	54	94	161852	68	164
Interest + (charge)	788528	117	204	357140	149	361
Taxes - Pers. Prop.	4200	01	01	28565	12	29
Farm Organ. fees	98532	14	26	35613	15	36
Total variable expenses	17711804	2627	4586	7189086	3000	7276
Real Estate tax	39140	06	10	11538	05	12
Depreciation	896670	133	232	464052	194	470
Unpaid operator labor	450000	67	117	232105	97	235
Total fixed expenses	1385810	206	359	707695	295	717
Total Fxpense	19097614			7896781	3295	7993
NET INCOME:	894031	133				
Gross to net income ratio	( )			3.52 to 1		/
Net return to mgmt.	( )			2365916	987	2395
Net return to labor, mgt.	( )			2903252	1211	2939
Net return to land, labor mgmt.	( )			2914790	1216	295
Total Expense/cwt. prod.	( )			3295		
Return/$100 invested	( )			12996		
Feed Cost/cwt.	( )			2345		
Non-feed cost/cwt.	( )			950		

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RECORD ANALYSIS

UNIT III

ANSWERS TO ASSIGNMENT SHEET #1

1. Machinery Enterprise: Wheat/Swine # of Units: 674,100 lbs./335 litters 8,818 Bu/300 Acres

*Expense Page	$ Crop	$ Livestock
Col. #1	$ 2,000	$ 2,000
Col. #2	6,225	2,075
Col. #4	285	285
Col.#13	4,125	1,375
Col.#14	675	675
Col.#17	300	300
Col.#21	1,500	500
Col.#22	-0-	-0-
Col.#23	2,850	2,850
SUB-TOTAL	$ 17,960	$ 10,060

TOTAL Machinery Investment Costs: Crop $ 17,960 + Livestock $ 10,060 = $ 28,020 (MI)

2. Net Return to Management per $1,000 of Machinery Investment:

*Net Return to Management (Crops $ 3,439.50 + Livestock $ 8,940.31) ÷ Machinery Investment (Calculated in #1 above) $ 28,020 X 1,000 = $ 441.42 (NRM/$1,000 MI)

3. Net Return to Labor and Management per $1,000 of Machinery Investment:

*Net Return to Labor and Management (Crops $ 5,323.75 + Livestock $ 23,078.36) ÷ Machinery Investment $ 28,020 X 1,000 = $ 1,013.64 (NRLM/$1,000 MI)

4. Net Return to Land, Labor, and Management per $1,000 of Machinery Investment:

*Net Return to Land, Labor, and Management (Crops $ 6,369.36 + Livestock $ 23,469.76) ÷ Machinery Investment $ 28,020 X 1,000 = $ 1,064.92 (NRLLM/$1,000 MI)

ANSWERS TO ASSIGNMENT SHEET #1

5. Gross Income per $1,000 of Machinery Investment:

*Gross Income (Crops $ 25,061.16 + Livestock $ 199,916.45) ÷ Machinery Investment $ 28,020 X 1,000 = $ 8,029.18 (GI/$1,000 MI)

6. Machinery Investment Per Unit of Production:

Machinery Investment $ 28,020 ÷ *acres of enterprise 300 = $ 93.40 per acre

or

Machinery Investment $ 28,020 ÷ * bushels of grain 8,818 = $ 3.18 per bushel

or

Machinery Investment $ 28,020 ÷ *number of litters 335 = $ 83.64 per litter

or

Machinery Investment $ 28,020 ÷ *100 lbs. of meat 674,100 = $ 0.0415 per pound

* Information material may be taken from Kansas Farm Account Book on case farm information pages SF U3-11 and SF U3-12 of this unit. Also use information sheets SF U3-4, SF U3-5, and SF U3-6.

RECORD ANALYSIS

UNIT III

ANSWERS TO ASSIGNMENT SHEET #2

1. Building Enterprise: Wheat/Swine # of Units: 674,100 lbs./335 litters
8,818 Bu/300 Acres

*Expense Page	$ Crop	$ Livestock
Col. #1	$ 500	$ 500
Col. #3	1,100	1,100
Col. #4	-0-	-0-
Col. #10	1,200	-0-
Col. #13	375	125
Col. #14	675	675
Col. #15	975	975
Col. #21	1,200	400
Col. #22	-0-	-0-
Col. #23	-0-	-0-
SUB-TOTAL	$ 6,025	$ 3,775

TOTAL Building Investment Costs: Crop $ 6,025 + Livestock $ 3,775 = $ 9,800 (BI)

2. Net Return to Management per $1,000 of Building Investment:

*Net Return to Management (Crops $ 3,439.50 + Livestock $ 8,940.31) ÷ Building Investment (Calculated in #1 above) $9,800 X 1,000 = $ 1,263.25 (NRM/$1,000 BI)

3. Net Return to Labor and Management per $1,000 of Building Investment:

*Net Return to Labor and Management (Crops $ 5,323.75 + Livestock $ 23,078.36) ÷ Building Investment $ 9,800 X 1,000 = $ 2,898.17 (NRLM/$1,000 BI)

4. Net Return to Land, Labor, and Management per $1,000 of Building Investment:

*Net Return to Land, Labor, and Management (Crops $ 6,369.36 + Livestock $ 23,469.76) ÷ Building Investment $ 9,800 X 1,000 = $ 3,044.80 (NRLLM/$1,000 BI)

ANSWERS TO ASSIGNMENT SHEET #2

5. Gross Income per $1,000 of Building Investment:

   *Gross Income (Crops $ 25,061.16 + Livestock $ 199,916.45) ÷ Building Investment $ 9,800 X 1,000 = $ 22,956.90 (GI/$1,000 BI)

6. Building Investment Per Unit of Production:

   Building Investment $ 9,800 ÷ *acres of enterprise 300 = $ 32.66 per acre

   or

   Building Investment $ 9,800 ÷ *bushels of grain 8,818 = $ 1.11 per bushel

   or

   Building Investment $ 9,800 ÷ *number of litters 335 = $ 29.25 per litter

   or

   Building Investment $ 9,800 ÷ *100 lbs. of meat 674,100 = $ 0.0145 per pound

* Information material may be taken from Kansas Farm Account Book on case farm information pages SF U3-11 and SF U3-12 of this unit. Also use information sheets SF U3-4, SF U3-5, and SF U3-6.

RECORD ANALYSIS

UNIT III

TEST

1. Match the terms on the right to their proper definitions:

_____a. The return to labor and management figure divided by the machinery investment costs multiplied by 1000 for any given enterprise

_____b. Includes both fixed costs and variable costs related to machinery ownership and operation, such as annual depreciation, interest, tax, insurance, housing, fuel, lubrication, repairs, and labor.

_____c. Number totals, which when analyzed individually and as a group, and then compared to similar data from similar standard enterprises, will indicate the relative success or failure of the enterprise.

_____d. The gross income figure divided by the machinery investment costs, multiplied by 1000, for any given enterprise.

_____e. The return to management figure divided by the machinery investment costs, multiplied by 1000, for any given enterprise.

_____f. The machinery investment figure divided by the number of acres, number of head, or other unit of production figures.

_____g. All the items of equipment or machinery and the expenses and receipts involved in producing a particular type of crop or livestock product.

_____h. The return to land, labor and management figure divided by the machinery investment costs, multiplied by 1000, for any given enterprise.

1. Machinery Enterprise
2. Net return to land, labor and management per $1000 of machinery investment
3. Machinery Investment per unit of Production
4. Net Return to Management per $1000 of machinery investment
5. Gross Income per $1000 of machinery investment
6. Net Return to Labor and Management per $1000 of machinery investment
7. Profitability analysis figures
8. Machinery Investment Costs

TEST

_____i. The gross income figure divided by the building investment costs, multiplied by 1000, for any given enterprise.

_____j. The return to labor and management figure divided by the building investment costs multiplied by 1000 for any given enterprise.

_____k. Includes both fixed costs and variable costs related to building construction maintenance and ownership, such as annual depreciation, interest, tax, insurance, repairs, fuel, labor.

_____l. Number totals, which when analyzed individually and as a group, and then compared to similar data from similar standard enterprises, will indicate the relative success or failure of the enterprise.

_____m. The return to land, labor and management figure divided by the building investment costs, multiplied by 1,000 for any given enterprise.

_____n. The return to management figure divided by the building investment costs, multiplied by 1000 for any given enterprise.

_____o. All the buildings and the expenses and receipts associated directly with them and involved in producing a particular type of crop or livestock product.

_____p. The building investment figure divided by the number of acres, number of head, other unit of production figures.

9. Net return to management per $1000 of building investment
10. Building Investment per Unit of Production
11. Net Return to Land, Labor and Management per $1000 of Building Investment
12. Building Enterprise
13. Gross income per $1000 of building investment
14. Profitability analysis figure
15. Building Investment Costs
16. Net Return to Labor and Management per $1000 of machinery investment

TEST

2. Calculate the profitability analysis figures as listed in the format below, based on the supplied information for wheat and swine Enterprise Analysis.

Machinery Enterprise: Wheat and Swine

# of Units: ____________ and ____________

a. *Expense Page

	$ Crop	$ Livestock
Col. #1	$ ________	$ ________
Col. #2	________	________
Col. #4	________	________
Col. #13	________	________
Col. #14	________	________
Col. #17	________	________
Col. #21	________	________
Col. #22	________	________
Col. #23	________	________
SUB-TOTAL	________	________

TOTAL Machinery Investment Costs: Crop________ + Livestock________ = ________ (MI)

*Gross Income ________

*Net Return to Management ________

*Net Return to Labor and Management ________

*Net Return to Land, Labor, and Management ________

b. *Calculate the Net Return to Management per $1,000 of Machinery Investment: (Use figures above.)

Formula:____________________________________

____

Answer:________________

c. *Calculate the Net Return to Labor and Management per $1,000 of Machinery Investment:

Formula:____________________________________

____

Answer:________________

TEST

d. *Calculate the Net Return to Land, Labor, and Management per $1,000 of Machinery Investment:

Formula: ____

____

Answer: ______________________

e. *Calculate the Gross Income per $1,000 of Machinery Investment:

Formula: ____

____

Answer: ______________________

f. *Calculate the Machinery Investment per Unit of Production: (Include figures per acre, per bushel, per litter, and per pound)

Formula: ____

____

Answer: ______________________

3. Calculate the profitability analysis figures as listed in the format below, based on the supplied information for wheat and swine Enterprise Analysis.

Building Enterprise: Wheat and Swine

# of Units: ______________________ and ______________________

a. *Expense Page	$ Crop	$ Livestock
Col. #1		
Col. #3		
Col. #4		
Col. #10		
Col. #13		
Col. #14		
Col. #15		
Col. #21		
Col. #22		
Col. #23		
SUB-TOTAL		

TEST

TOTAL Building Investment Costs: Crop________ + Livestock_____

________ = _________ (BI)

*Gross Income ________________

*Net Return to Management ________________

*Net Return to Labor and Management ________________

*Net Return to Land, Labor, and Management ________________

b. *Calcualte the Net Return to Management per $1,000 of Building Investment: (Use figures above.)

Formula:____

____

Answer:____________________

c. *Calculate the Net Return to Labor and Management per $1,000 of Building Investment:

Formula:____

____

Answer:____________________

d. *Calculate the Net Return to Land, Labor, and Management per $1,000 of Building Investment:

Formula:____

____

Answer:____________________

e. *Calculate the Gross Income per $1,000 of Building Investment:

Formula:____

____

Answer:____________________

TEST

f. *Calculate the Building Investment per Unit of Production:
(Include figures per acre, per bushel, per litter, and per pound)

Formula:____

____

Answer:________________per acre,________________per bushel, ________________per litter, ________________ per pound

*Previously analyzed enterprise data supplied by instructor.

RECORD ANALYSIS

UNIT III

ANSWERS TO TEST

1. a. 6
   b. 8
   c. 7
   d. 5
   e. 4
   f. 3
   g. 1
   h. 2
   i. 13
   j. 16
   k. 15
   l. 14
   m. 11
   n. 9
   o. 12
   p. 10

2. a. Machinery Enterprise: Wheat and Swine

   # of Units: 674,100 lbs./335 litters and 8,818 Bu/300 acres

*Expense Page	$ Crop	$ Livestock
Col. #1	$ 2,000	$ 2,000
Col. #2	6,225	2,075
Col. #4	285	285
Col. #13	4,125	1,375
Col. #14	675	675
Col. #17	300	300
Col. #21	1,500	500
Col. #22	-0-	-0-
Col. #23	2,850	2,850
SUB-TOTAL	$ 17,960	$ 10,060

TOTAL Machinery Investment Costs: Crop $ 17,960 + Livestock $ 10,060 = $ 28,020 (MI)

ANSWERS TO TEST

b. Net Return to Management per $1,000 of Machinery Investment:

*Net Return to Management (Crops $ 3,439.50 + Livestock $ 8,940.31) ÷ Machinery Investment $ 28,020 X 1,000 = $ 441.42 (NRM/$1,000 MI)

c. Net Return to Labor and Management per $1,000 of Machinery Investment:

*Net Return to Labor and Management (Crops $ 5,323.75 + Livestock $ 23,078.36) ÷ Machinery Investment $ 28,020 X 1,000 = $ 1,013.64 (NRLM/$1,000 MI)

d. Net Return to Land, Labor, and Management per $1,000 of Machinery Investment:

*Net Return to Land, Labor, and Management (Crops $ 6,369.36 + Livestock $ 23,469.76) ÷ Machinery Investment $ 28,020 X 1,000 = $ 1,064.92 (NRLLM/$1,000 MI)

e. Gross Income per $1,000 of Machinery Investment:

*Gross Income (Crops $ 25,061.16 + Livestock $ 199,916.45 ÷ Machinery Investment $ 28,020 X 1,000 = $8,029.18(GI/$1,000 MI)

3. a. Building Enterprise: Wheat/Swine

# of Units: 674,100 lbs./335 litters and 8,818 Bu/300 Acres

*Expense Page	$ Crop	$ Livestock
Col. #1	$ 500	$ 500
Col. #3	1,100	1,100
Col. #4	-0-	-0-
Col. #10	1,200	-0-
Col. #13	375	125
Col. #14	675	675
Col. #15	975	975
Col. #21	1,200	400
Col. #22	-0-	-0-
Col. #23	-0-	-0-
SUB-TOTAL	$ 6,025	$ 3,775

TOTAL Building Investment Costs: Crop $ 6,025 + Livestock $ 3,775 = $ 9,800 (BI)

ANSWERS TO TEST

b. Net Return to Management per $1,000 of Building Investment:

*Net Return to Management (Crops $ 3,439.50 + Livestock $ 8,940.31) ÷ Building Investment $ 9,800 X 1,000 = $ 1,263.25 (NRM/$1,000 BI)

c. Net Return to Labor and Management per $1,000 of Building Investment:

*Net Return to Labor and Management (Crops $ 5,323.75 + Livestock $ 23,078.36) ÷ Building Investment $ 9,800 X 1,000 = $ 2,898.17 (NRLM/$1,000 BI)

d. Net Return to Land, Labor, and Management per $1,000 of Building Investment:

*Net Return to Land, Labor, and Management (Crops $ 6,369.36 + Livestock $ 23,469.76) ÷ Building Investment $ 9,800 X 1,000 = $ 3,044.80 (NRLLM/$1,000 BI)

e. Gross Income per $1,000 of Building Investment:

*Gross Income (Crops $ 25,061.16 + Livestock $ 199,916.45) ÷ Building Investment $ 9,800 X 1,000 = $ 22,956.90 (GI/$1,000 BI)

f. Building Investment Per Unit of Production:

Building Investment $ 9,800 ÷ *acres of enterprise 300 = $ 32.66 per acre

or

Building Investment $ 9,800 ÷ *bushels of grain 8,818 = $ 1.11 per bushel

or

Building Investment $ 9,800 ÷ *number of litters 335 = $ 29.25 per litter

or

Building Investment $ 9,800 ÷ *100 lbs. of meat 674,100 = $ 0.0145 per pound

* Information material taken from Wheat and Swine Enterprise Analysis sheets pages SF U3-11 and SF U3-12 of this unit.

RECORD ANALYSIS

UNIT IV

TOTAL FARM ANALYSIS

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to complete a total farm business analysis and use the data in the decision-making process. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Define the terms associated with business analysis.
2. Identify three uses of farm business analysis.
3. Complete the business analysis statement in the Kansas Farm Account book by following the steps outlined.
4. List five measures of success calculated on the business analysis statement and compare them with a recent Kansas Farm Management Association summary secured at the County Extension office.
5. Select two ways to improve each of the five success factors from a list.
6. Calculate the returns to capital for a given situation.

RECORD ANALYSIS

UNIT IV

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Secure most recent copy of Farm Management Association Summary and Analysis for the area
5. Provide a set of Case farm records, such as the Kansas Extension Service uses in Record Keeping Workshops
6. Bring a Farm Management Association member into the classroom to explain uses made of computerized printouts of summaries
7. Show filmstrip, "Summarizing and Analyzing Records", Vocational Agriculture Service, University of Illinois
8. Discuss Terminal and Specific Objectives
9. Discuss Information and Assignment Sheets
10. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and turn in to instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Master

   TM 1 - Measures of Farm Success

4. Assignment Sheets

   #1 - Strengths and Weaknesses in Business

   #2 - Success Factor Improvement List

5. Answers to Assignment Sheets
6. Test
7. Answers to Test

References:

1. Record Keeping with the Kansas Farm Account Book, John Schlender.
2. Management Guides from the Kansas Farm Management Handbook.

RECORD ANALYSIS

UNIT IV

INFORMATION SHEET

I. Terms and Definitions

A. Success Factors - Farms with averages equal to or exceeding comparable figures have been the most successful financially.

B. Gross Income - Income from the sale of grain, feed, or animals, plus the sale of livestock minus their cost, plus inventory gain of livestock held over one year.

C. Comparative Analysis - Analyzing a farm's strengths and weaknesses by comparison to some standard.

D. Value of Production - Calculated by subtracting purchased feed from gross income.

E. Net Capital (sometimes called Equity Capital) - The owner's net investment in the business arrived at by subtracting the debts owed from the value of capital assets.

F. Investment Managed - Included inventory values of all capital assets owned by a farmer, plus the value of land or other assets rented.

G. Farm Management Association - Groups of farmers in each area of Kansas who keep detailed records and turn them into a field man periodically for input in a computerized analysis system. A summary of these records is printed each year.

II. Three Uses of Farm Business Analysis

A. Diagnosing strengths and weaknesses in the operation.

B. Comparing the farm's performance to similar size farms and type of enterprises.

C. Providing a basis to plan future improvements.

III. Steps in Completing the Management Factors

A. After filling in lines 1 through 6, complete the "Standards for Man Work Days", page 16, by filling in each crop acreage times the value for the area and multiplying the number of livestock handled by the standards for that enterprise. Transfer the total to line 7.

INFORMATION SHEET

(NOTE: Line numbers represent the locations of these factors on the Farm Business Analysis sheet of the Kansas Farm Account Book.)

B. Assume the operator has supplied 12 months of labor and enter the figure on line 8. Hired labor will need to be converted to months by dividing days worked by 24, then placing the total on line 9. Unpaid family labor will need to be estimated on the basis of how much hired labor needed if the family were not available to work. Total the months of labor and divide by 12 on line 11.

C. Calculate Per Man Efficiencies on Lines 12 to 16.

D. Compute machinery factors by bringing forward the investment values from the Net Worth Statement and the expense entries from page 15 called for on line 21. Machine work receipts included in the Custom Machine Work column on the Cash Inflow page are to be listed on line 25 as a credit against machinery expense so that the net machinery cost for the crops grown on the farm can be calculated on line 26. Machinery expense will need to be calculated on line 26. Machinery expense will need to ba allocated to Crop Share (col. B) and Livestock Share (col. C). Listing machinery in three columns of "For Crop Use Only", "For Livestock Use Only", and "Used in Both Areas". By prorating a share to crops and livestock from the third column, you can add these shares to the first two columns and compute a share of the total machinery investment.

E. In arriving at total value of all crops produced, be sure to include all crops produced on rented and owned land whether fed to livestock, sold, or stored. Rent share to the landlord is recorded on line 30. Include a pasture value for acreage that has received fertilizer or chemical application or tree and brush control. These factors would be a part of the cash crop costs and the depreciation allowances.

F. Operators return for labor and management are computed from previously collected data as the instructions note.

G. Profit Guides can be calculated for those enterprises included in the farm operation. Supplemental records will need to be kept to provide animals raised or weaned and products put on the market.

INFORMATION SHEET

IV. Success Factors to Be Compared with a Recent Copy of a Farm Management Association Summary

	F.M. Association	Case Farm
1. Gross Income per Man, line 13.	$85,000.00	$67,480.00
2. Machinery Investment/crop acre, line 20	60.00	55.46
3. Machine Cost/crop acre, line 27	40.00	30.58
4. Gross Crop Value/acre	100.00	95.04
5. Total farm expenses/$1 gross income, line 59	.75	.82

V. From the handout, "Measures of Farm Success and How to Influence Them", select methods

VI. Returns to Capital start with net income from line 40, page 15. Subtract the value of unpaid family labor on line 44 of page 17 and a value for the operator's labor at 3200 hours times the current rate of $__________________. To this residue, add back the interest paid on line 20, page 15 for the whole farm. This total is divided by the Net Capital on line 42, page 17 and multiplied by 100. The resulting figure is the rate of return on the Net Investment. (assuming there was a net profit above unpaid labor)

If this rate of return doesn't exceed the rate of interest paid by financial institutions on Certificates of Deposit, it would seem the farmer should have his money invested somewhere other than his present farm unit.

Measures of Farm Success

1. GROSS INCOME PER MAN
   - SHIFT TO HIGHER RETURN CROPS
   - RAISE FORAGE CROPS FOR CATTLE
   - FEED OUT RAISED LIVESTOCK
   - SHIFT FROM GRADE B TO GRADE A DAIRY
   - ADOPT "PRODUCTION TESTING" SYSTEMS
   - PLANT BEST PAYING CROP ON EACH ACRE
2. GROSS RETURNS PER CROP ACRE
   - GROW HIGHEST RETURN CROPS ADAPTED
   - FERTILIZE ACCORDING TO SOIL TEST
   - CLEAR WEEDS FROM PRODUCTIVE PASTURE
   - FERTILIZE BROME GRASS PASTURES
   - PLAN A BETTER WEED CONTROL SYSTEM
   - BUY BETTER PLANTING EQUIPMENT
3. MACHINERY INVESTMENT PER CROP ACRE
   - CONSIDER RENTAL OR CUSTOM HIRING
   - BUILD A HEATABLE REPAIR SHOP
   - AVOID "NEW PAINT" DISEASE UNTIL AFFORDABLE
   - ANALYZE POWER NEEDS
4. EXPENSES PER $1 GROSS INCOME
   - INCREASE GROSS INCOME
   - REDUCE LOW RETURN CASH OUTLAYS
   - KNOW COST OF PRODUCTION-ATTACK THOSE COSTS OUT OF LINE WITH AVERAGES
5. MACHINERY COST PER CROP ACRE
   - RELATE INVESTMENT TO CROP ACRES
   - REPAIR MACHINERY IN OFF SEASONS
   - STUDY OPERATORS MANUALS
   - CONSIDER REDUCED TILLAGE SYSTEMS
   - AVOID SMALL ACREAGE NUISANCE CROPS
   - RENT SPECIALIZED MACHINES INSTEAD OF OWNING

SF U4-8

RECORD ANALYSIS

UNIT IV

ASSIGNMENT SHEET #1: Strengths and Weaknesses Business

After completing the "Case Farm: business analysis use this sheet to point out the strengths and weaknesses of the business.

I. Strengths in Farm Business:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

II. Weaknesses in Farm Business:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

III. Farm Business Goals to Be Accomplished Next Year:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

IV. Things That Need to Be Done to Alleviate Weaknesses Next Year:

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

V. Farm Business Goals to be Accomplished Within Next 10 Years:

1.
2.
3.
4.
5.

ASSIGNMENT SHEET #1

VI. Things That Need to Be Done to Alleviate Weaknesses Over the Next 10 Years:

1.
2.
3.
4.
5.

RECORD ANALYSIS

UNIT IV

ASSIGNMENT SHEET #2: Success Factor Improvement List

List two ideas to use in improving the Success Factors on the "Case" farm.

1. Gross income per man -

   A.

   B.

2. Gross returns per crop acre -

   A.

   B.

3. Machinery investment per crop acre -

   A.

   B.

4. Expenses per $1 gross income -

   A.

   B.

5. Machinery cost per crop acre -

   A.

   B.

RECORD ANALYSIS

UNIT IV

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

I. Strengths in Farm Business:

1. Gross income per man above average
2. Crop returns/acre above average
3. Equity for security credit adequate
4. Man productive work units provide full time employment
5. Machine cost/crop acre average
6.
7.
8.
9.
10.

II. Weaknesses in Farm Business:

1. Livestock expenses too high
2. Machinery investment/crop acre too high
3. Returns per $100 of feed fed too low
4. Total expenses per $100 gross income too high
5. Pigs marketed per sow too low
6. Beef cattle net income too low
7.
8.
9.
10.

III. Farm Business Goals to Be Accomplished Next Year:

1. Reduce cash expenses
2. Reduce machinery investment/crop
3. Improve pigs weaned/sow number
4. Reduce amount of grain purchased
5.
6.
7.
8.
9.
10.

IV. Things That Need to Be Done to Alleviate Weakensses Next Year:

1. Improve records so that cost of production is known for each enterprise
2. Concentrate on increasing pigs marketed per sow
3. Buy feeder cattle right so that a potential profit is projected
4.
5.
6.
7.
8.
9.
10.

ANSWERS TO ASSIGNMENT SHEETS

V. Farm Business Goals to Be Accomplished Within Next 10 Years:

1. Fully utilize pasture and surplus rough feed to increase beef income.
2. Reduce machinery fixed costs by reducing new purchases.
3. Improve expenses per $100 gross income.
4. Reduce short term debt. Some may need to be shifted to long-term real estate refinancing.

VI. Things That Need to Be Done to Alleviate Weaknesses Over the Next 10 Years:

1. Keep machinery investment per acre in line.
2. Hire some of machine work where ownership costs are too high.
3. Plan cattle program for more flexibility.
4. Know costs of production in all enterprises so as to plan a better marketing system.

Assignment Sheet #2

1. Gross income per man -

   A. Adopt production testing in the hog operation to increase gross income per sow.

   B. Plan beef cattle purchases better to increase potential gross income. (Be more flexible.)

2. Gross returns per crop acre -

   A. Fertilize according to soil tests.

   B. Grow highest return crops adapted.

3. Machinery investment per crop acre -

   A. Rent specialized machinery instead of owning or hire custom work.

   B. Relate investment to the crop acres farmed. (Reduce investment/crop acre.)

4. Expenses per $1 gross income -

   A. Reduce cash expenses for livestock, especially grain.

   B. Know cost of production in the hog operation.

ANSWERS TO ASSIGNMENT SHEETS

5. Machinery cost per crop acre -

   A. Hire custom operators for small acreages.

   B. Do more repairing of machinery in off season.

RECORD ANALYSIS

UNIT IV

TEST

1. Match the terms on the right to the correct definition:

______a. Those business analysis items associated with successful farms.

______b. Income from sale of farm raised grain to livestock plus the sale of purchased livestock, minus their cost plus Inventory change.

______c. Analyzing a farm's strong and weak points compared to a standard.

______d. Gross Income minus purchased feed.

______e. Owners capital asset value minus debts owed.

______f. Inventory values of capital assets owned plus value of rented land or other assets.

______g. Farmers keeping detailed records used for computerized summaries.

1. Value of Production
2. Investment Managed
3. Net Capital
4. Success Factors
5. Farm Management Association
6. Gross Income
7. Comparative Analysis

2. Identify three (3) uses of a farm business analysis:

1.

2.

3.

3. Complete the business analysis statement on the case farm.

4. List five (5) measures of success calculated in the business analysis.

5. Select two (2) ways of improving each of five measures of success.

TEST

6. Calculate the returns to capital for a given situation:

Net Farm Income, $15,000

Operator's labor of 3200 hours @ $3.50/hour ____________________

Unpaid family labor, $2400.00

Interest Paid, $5700.00

Net Capital, $156,000

RECORD ANALYSIS

UNIT IV

ANSWERS TO TEST

1. a. 4
   b. 6
   c. 7
   d. 1
   e. 3
   f. 2
   g. 5

2. Uses Include:
   1. Diagnosing strengths and weaknesses of a farm operation
   2. Comparing the farm performance to similar size farms and types of enterprises
   3. Providing a basis to plan future improvements

3. Complete the business analysis assignment sheets to the satisfaction of the instructor.

4. Any five:
   1. Gross Income per man
   2. Machinery investment per crop acre
   3. Machinery cost per crop acre
   4. Gross crop value per crop acre
   5. Total Farm expenses per $1 gross income

5. Any of the following:
   1. Gross income per man
      a. Shift to higher return crops
      b. Raise forage crops for cattle or sheep
      c. Feed out raised livestock
      d. Adopt "production testing" systems
      e. Plant

ANSWERS TO TEST

2. Gross Returns per crop acre
   a. Grow highest value crop adapted
   b. Fertilize according to soil test
   c. Clear weeds from productive pasture
   d. Fertilize cool season grasses
   e. Plan better weed control
   f. Purchase better planting equipment

3. Machinery investment per crop acre
   a. Consider rental or custom hiring
   b. Build a heatable repair shop
   c. Avoid "new paint" disease until affordable
   d. Analyze power needs.

4. Expenses per $1 Gross Income
   a. Increase gross income
   b. Reduce low returns cash outlays
   c. Know cost of production - attach those costs out of line with averages.

5. Machinery Cost/Crop Acre
   a. Relate investment to crop acres
   b. Repair machinery in off season
   c. Study operators manuals
   d. Consider reduced tillage systems
   e. Avoid small acreage nuisance crops
   f. Rent specialized machines instead of owning

6. 4.5%

LABOR MANAGEMENT

UNIT I

DETERMINING LABOR NEEDS

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to calculate the labor requirements for each farm enterprise, measure the amount of family labor available, and design seasonal and annual work schedules for the farm. The student will be able to plan the acquisition of additional hired labor to maximize return for each dollar invested in total labor. The objective will be considered achieved by completing the assignment sheets and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, the student will be able to:

1. Match terms and definitions associated with determining labor needs.
2. Calculate the number of man work days for each crop and livestock enterprise, and for the total farm operation. (Assignment Sheet #1)
3. Calculate the amount of family and hired labor available for each crop and livestock enterprise and for the total farm operation. (Assignment Sheet #1)
4. Plan a monthly work schedule for each crop and livestock enterprise and for the total farm operation. (Assignment Sheet #2)
5. Plan the acquisition of additional hired labor as needed to meet the labor requirements for each crop and livestock enterprise and for the total farm operation. (Assignment Sheet #2)
6. Determine how much a farmer can afford to pay for an additional employee. (Assignment Sheet #3)

LABOR MANAGEMENT

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets and a copy of the publication, "Managing Hired Farm Labor", Cooperative Ext. Serv., K.S.U.
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Demonstrate procedures for working problems contained in Assignment Sheets by supplying examples
7. Give Test
8. Assist student in implementing specific labor management plans to maximize profitability for the total operation

Student:

1. Read Objectives
2. Study Information Sheet
3. Demonstrate procedures for working problems contained in Assignment Sheets
4. Take Test
5. Implement specific labor management plans to maximize profitability for the total operation

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheet

INSTRUCTIONAL MATERIALS

3. Transparency Masters

   TM 1 - Farm Labor Analysis Work Sheet

   TM 2 - Additional Labor Acquisition Work Sheet

   TM 3 - Determining QUANTITY of Additional Labor

4. Assignment Sheets

   #1 - Farm Labor Analysis

   #2 - Additional Labor Acquisition

   #3 - Determining QUANTITY of Additional Labor

5. Test

6. Answers to Test

References:

1. Kansas Farm Management State Summary and Analysis Report, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS 66506.

2. Kansas Farm Management Handbook, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS 66506.

3. Kansas Farm Account Book, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS 66506.

4. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service.

LABOR MANAGEMENT

UNIT I

INFORMATION SHEET

I. Terms and Definitions

A. Man Work Day - The labor measurement of the quantity of work which can be accomplished by the average man in an average work day.

B. Labor Requirement - The number of man work days required to complete a given task, or to accomplish the production of a given product, in an enterprise or farm operation.

C. Family Labor - The total labor in man work days which can be provided by members of the farm family including full and part-time activity, to accomplish a given task or production of a given product in an enterprise or farm operation.

D. Hired Labor - The total labor in man work days which is purchased either full or part-time to accomplish a given task or production of a given product in an enterprise or farm operation.

E. Monthly Work Schedule - The total labor in man work days which is necessary at a standard efficiency level, to accomplish the monthly tasks involved in an enterprise or a farm operation. This may include one or several months totaling up to an annual man work day total for the enterprise or farm operation.

(Ex. - Monthly Work Schedule for swine farrowing to finish enterprise.)

F. Seasonal Work Schedule - The total labor in man work days which is necessary at a standard efficiency level to accomplish the seasonal tasks involved in an enterprise or a farm operation. This may include one or several seasons totaling up to the annual man work day total for the enterprise or farm operation.

(Ex. - Spring, Summer and Fall Work Schedule for a corn production enterprise.)

Farm Labor Analysis Worksheet

STANDARDS FOR MAN WORK DAYS

To obtain the Man Work Days represented for crops in your farm business, multiply the number of acres of crops by the standards shown (Man Work Days = No. of Acres × Standards). For full year livestock enterprises, multiply the number of head by the standard (Man Work Days = No. of Head × Standard). For cattle feeding enterprises, multiply the number of head times the number of months times the standard (Man Work Days = No. of Head × Months × Standard).

Sum of Each Family Member X Work Days each is available.

CROP	ACRES	MAN WORK STANDARDS EAST	CENTRAL	WEST	IRRIG	(1) MAN WORK DAYS	(2) Family	(3) Hired
Wheat, ~~Barley, Rye~~	400	.2	.2	.1	.3	80		
Oats	20	.2	.2	.1	.3	6		
Corn Irrigated	200	.4	.3	.2	.4	80		
Grain Sorghum	220	.3	.2	.2	.3	66		
Soybeans	320	.3	.2	.2	.3	80		
Sugar Beets	20	—	—	—	.5	10		
Other Cash Crops	820	—	—	—	.3	246		
alfa	100	.9	.7	.3	.4	90		
Brome, Bermuda, Prairie	150	.3	.2	.2	.3	30		
Silage	90	.6	.5	.5	.5	45		
Temporary Pasture	70	.2	.1	.1	.2	14		
Summer Fallow		—	.1	.1	—			
TOTAL CROP MAN WORK DAYS (Add L. 47-58)		XXX	XXX	XXX	XXX	XXXXX		
LIVESTOCK	NO. OF HEAD	NO. OF MONTHS		STANDARD				
Beef Cows	100	XXXXXXX		.8		80		
Dairy Cows	70	XXXXXXX		6.0		420		
Swine—Litters (farrowing—weaning)	130	XXXXXXX		.9		117		
Feeder Pigs Raised	120	XXXXXXX		.05		6		
Feeder Pigs Purchased	1800	XXXXXXX		.05		90		
Ewes	200	XXXXXXX		.4		.80		
Feeder Lambs Purchased	200	XXXXXXX		.075		15		
Laying Hens 1000	1000	XXXXXXX		20.0		20		
Winter Calf	100			.05		25		
Winter Graze	100			.04		20		
Background Drylot	100			.07		35		
Deferred Steers	200			.06		60		
Deferred Heifers	200			.05		50		
Summer Graze	400			.015		30		
Background Finish	250			.07		88		
Beef Finish	590			.07		206		
TOTAL LIVESTOCK MAN WORK DAYS (Add L. 61-78)	XXXXX	XXXXXXX		XXXXXXX				
TOTAL FARM MAN WORK DAYS (Add L. 59 & 79)	XXXXX	XXXXXXX		XXXXXXX				

Additional Labor Acquisition Worksheet

FARM MONTHLY WORK SCHEDULE LABOR REQUIRED

MONTHS		J	F	M	A	M	J	J	A	S	O	N	D	Yr.
Crop Enterprises	ACRES	Man Work Days Required												
1. Wheat	140	-	-	1.0	1.0	-	6.0	5.0	3.0	6.0	6.0	-	-	28.0
2. Corn	189	-	-	2.8	5.6	11.3	8.5	2.9	2.9	2.9	8.5	8.5	2.8	56.7
3. Soybeans	210	-	-	2.0	4.2	8.4	8.4	4.2	2.1	4.2	8.4	-	-	41.9
4.														
5.														
Total Crop														
Livestock Enterprises	LITTERS	Man Work Days Required												
1. Hogs 128 litters	128	15.4	17.3	15.4	15.4	17.3	15.4	15.4	17.3	15.4	15.4	17.3	15.4	192.4
2.														
3.														
4.														
5.														
Total Livestock														
Overhead non crop - non livestock		4.8	4.8	4.7	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	4.7	95.0
Total Farm		20.2	22.1	26.5	37.9	52.7	47.0	34.0	33.6	34.1	47.0	39.9	24.4	419.4
Family Utilizable Man, wife, and young son Hired Utilizable		41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	499.2
Additional Req.						11.1					5.4			16.5

Determining QUANTITY of Additional Labor

Procedure #1 - Value of Additional Labor Based on Gross Income

It is difficult to pay wages if the farm or enterprise won't justify additional hired labor because of limited volume, low efficiency, or ineffective organization. It takes a large amount of added production to justify a full-time additional employee. One procedure of determining if the farm business or enterprise can afford the expense of additional hired labor is to examine the gross income.

Accepted Standard to Qualify for Additional Labor is as follows:

Enterprise or Farm Gross Income X 75% Total Expenses

(If 75% of the Gross Income is larger than the Total Expenses, the operation can utilize some additional hired labor. To calculate the dollar quantity, proceed to procedure #2.)

Procedure #2

To calculate the dollar quantity of additional gross income which a given farm or enterprise must generate to justify additional hired labor. Utilize the following formula, using data from a previous farm or enterprise analysis.

$$\left(\frac{\text{Gross Income}}{\text{Return to Labor \& Mgmt.}}\right) = \underline{\qquad\qquad} \times \left(\begin{array}{l}\text{Proposed \$}\\ \text{of Additional}\\ \text{Labor}\end{array}\right) = \left(\begin{array}{l}\text{Additional}\\ \text{Gross Income}\\ \text{Needed to}\\ \text{Justify}\end{array}\right)$$

$$\frac{209{,}880.59}{63{,}658.07} = 3.30 \qquad (209{,}880.59)(.75) = 157{,}410.44$$

Procedure #3 - Additional Labor vs. Additional Machinery

A manager making the decision of whether to hire more labor or purchase more machinery will generally consider several points. Among these will be:

1) The cost of hired labor;
2) Whether the capacity per man can be increased with additional machinery, and

3) The relative value of labor and capital on the particular farm.

To calculate the feasible dollar rate per hour of labor versus machine investment, complete the following procedure:

$$\frac{\text{Alternate Annual Machinery Cost}}{\text{Annual Hours Labor Saved}} = \text{Maximum Feasible \$ Amount/Hr. to be Paid for Labor}$$

Example - Replace 500 hours of labor per year by purchasing a machine that cost $2,000.00

$$\frac{2{,}000}{500} = \$4.00\text{/hr.}$$ Maximum Feasible Rate Per Hour for Labor

Machinery can increase efficiency so that farm operators can increase their number of acres per man. However, machinery is becoming more sophisticated, as well as more expensive. Labor used to operate the machinery must be competent or maintenance costs will soar.

LABOR MANAGEMENT

UNIT I

ASSIGNMENT SHEET #1: Farm Labor Analysis

Perform specific objectives #2 through #3 by utilizing the procedures shown below, and additional information supplied by your instructor. After analyzing an example labor situation, the instructor may have you analyze your own operation, with information from your Kansas Farm Record Book.

STANDARDS FOR MAN WORK DAYS

To obtain the Man Work Days represented for crops in your farm business, multiply the number of acres of crops by the standards shown (Man Work Days = No. of Acres × Standards). For full year livestock enterprises, multiply the number of head by the standard (Man Work Days = No. of Head × Standard). For cattle feeding enterprises, multiply the number of head times the number of months times the standard (Man Work Days = No. of Head × Months × Standard).

Sum of Each Family Member X Work Days each is available.

CROP	ACRES	MAN WORK STANDARDS				(1) MAN WORK DAYS	(2) Family	(3) Hired
		EAST	CENTRAL	WEST	IRRIG			
Wheat, Barley, Rye		.2	.2	.1	.3			
Oats		.2	.2	.1	.3			
Corn		.4	.3	.2	.4			
Grain Sorghum		.3	.2	.2	.3			
oybeans		.3	.2	.2	.3			
Sugar Beets		—	—	—	.5			
Other Cash Crops		—	—	—	.3			
Alfalfa		.9	.7	.3	.4			
Brome, Bermuda, Prairie		.3	.2	.2	.3			
Silage		.6	.5	.5	.5			
Temporary Pasture		.2	.1	.1	.2			
Summer Fallow		—	.1	.1	—			
TOTAL CROP MAN WORK DAYS (Add L. 47-58)		XXX	XXX	XXX	XXX	XXXXX		
LIVESTOCK	NO. OF HEAD	NO. OF MONTHS		STANDARD				
Beef Cows		XXXXXXX		8				
Dairy Cows		XXXXXXX		6.0				
Swine—Litters (farrowing—weaning)		XXXXXXX		.9				
Feeder Pigs Raised		XXXXXXX		.05				
Feeder Pigs Purchased		XXXXXXX		.05				
Ewes		XXXXXXX		.4				
Feeder Lambs Purchased		XXXXXXX		.075				
Laying Hens/1000		XXXXXXX		20.0				
Winter Calf				.05				
Winter Graze				.04				
Background Drylot				.07				
Deferred Steers				.06				
Deferred Heifers				.05				
ummer Graze				.015				
ackground Finish				.07				
Beef Finish				.07				
TOTAL LIVESTOCK MAN WORK DAYS (Add L. 61-78)	XXXXX	XXXXXXX		XXXXXXX				
TOTAL FARM MAN WORK DAYS (Add L. 59 & 79)	XXXXX	XXXXXXX		XXXXXXX				

LABOR MANAGEMENT

UNIT I

ASSIGNMENT SHEET #2: Additional Labor Acquisition

Perform specific objectives #4 and #5 by utilizing the procedures shown below, and additional information supplied by your instructor. After analyzing an example farm labor situation, the instructor may have you analyze your own operation with information from your Kansas Farm Record Book.

FARM MONTHLY WORK SCHEDULE LABOR REQUIRED

MONTHS		J	F	M	A	M	J	J	A	S	O	N	D	Yr.
Crop Enterprises	ACRES	Man Work Days Required												
1. 2. 3. 4. 5. Total Crop														
Livestock Enterprises	LITTERS	Man Work Days Required												
1. 2. 3. 4. 5. Total Livestock														
Overhead non crop - non livestock														
Total Farm														
Family Utilizable Hired Utilizable														
Additional Req.														

LABOR MANAGEMENT

UNIT I

ASSIGNMENT SHEET #3: Determining QUANTITY of Additional Labor

Perform specific objective #6 by utilizing the procedures shown below, and additional information supplied by worksheet #1 and #2. After analyzing an example farm labor situation, the instructor may have you analyze your own operation, with information from your Kansas Farm Record Book.

Procedure #1 - Value of Additional Labor Based on Gross Income

It is difficult to pay wages if the farm or enterprise won't justify additional hired labor because of limited volume, low efficiency, or ineffective organization. It takes a large amount of added production to justify a full-time additional employee. One procedure of determining if the farm business or enterprise can afford the expense of additional hired labor is to examine the gross income.

Accepted Standard to Qualify for Additional Labor is as follows:

Enterprise or Farm Gross Income X 75% > Total Expenses

(If 75% of the Gross Income is larger than the Total Expenses, the operation can utilize some additional hired labor. To calculate the dollar quantity, proceed to procedure #2).

Procedure #2 -

To calculate the dollar quantity of additional gross income, which a given farm or enterprise must generate to justify additional hired labor, utilize the following formula using data from a previous farm or enterprise analysis.

$$\left(\frac{\text{Gross Income}}{\text{Return to Labor \& Mgmt.}}\right) = \underline{\hspace{3cm}} \times \left(\begin{array}{l}\text{Proposed \$}\\ \text{of Additional}\\ \text{Labor}\end{array}\right) = \left(\begin{array}{l}\text{Additional}\\ \text{Gross Income}\\ \text{Needed to}\\ \text{Justify}\end{array}\right)$$

Procedure #3 - Additional Labor vs. Additional Machinery

A manager making the decision of whether to hire more labor or purchase more machinery will generally consider several points. Among these will be:

1) The cost of hired labor;
2) Whether the capacity per man can be increased with additional machinery, and
3) The relative value of labor and capital on the particular farm.

To calculate the feasible dollar rate per hour of labor versus machine investment, complete the following procedure:

$$\frac{\text{Alternate Annual Machinery Cost}}{\text{Annual Hours Labor Saved}} = \text{Maximum Feasible \$ Amount/Hr. to be Paid for Labor}$$

Example - Replace 500 hours of labor per year by purchasing a machine that cost $2,000.00.

$$\frac{2{,}000}{500} = \$4.00\text{/hr. Maximum Feasible Rate Per Hour for Labor}$$

Machinery can increase efficiency so that farm operators can increase their number of acres per man. However, machinery is becoming more sophisticated, as well as more expensive. Labor used to operate the machinery must be competent or maintenance costs will soar.

LABOR MANAGEMENT

UNIT I

TEST

1. Match the terms on the right to their proper definitions.

_____a. The total labor in man work days is necessary at a standard efficiency level, to accomplish the monthly tasks involved in an enterprise or a farm operation. This may include one or several months totaling up to an annual man work day to total for the enterprise or farm operation.

_____b. The labor management of the quantity of work which can be accomplished by the average man in an average work day.

_____c. The total labor in man work days which is purchased either full or part-time to accomplish a given task or production of a given product in an enterprise or farm operation.

_____d. The number of man work days required to complete a given task, or to accomplish the production of a given product, in an enterprise or farm operation.

_____e. The total labor in man work days which is necessary at a standard efficiency level to accomplish the seasonal tasks involved in an enterprise or a farm operation. This may include one or several seasons totaling up to the annual man work day totals for the enterprise or farm operation.

_____f. The total labor in man work days which can be provided by members of the farm family, including full and part-time activity, to accomplish a given task or production of a given product in an enterprise or farm operation.

1. Labor Requirement
2. Family
3. Seasonal Work Schedule
4. Man Work Day
5. Monthly Work Schedule
6. Hired Labor

2. Calculate the number of man work days for the crop and livestock enterprises listed below by your instructor, utilizing the procedure shown below. Also calculate the total farm workdays based on this same information.

Crop Enterprise -

Livestock Enterprise -

STANDARDS FOR MAN WORK DAYS

To obtain the Man Work Days represented for crops in your farm business, multiply the number of acres of crops by the standards shown (Man Work Days = No. of Acres × Standards). For full year livestock enterprises, multiply the number of head by the standard (Man Work Days = No. of Head × Standard). For cattle feeding enterprises, multiply the number of head times the numberal months times the standard (Man Work Days = No of Head × Months × Standard).

Sum of Each Family Member X Work Days Each is Available

CROP	ACRES	MAN WORK STANDARDS				(1) MAN WORK DAYS	(2) Family	(3) Hired
		EAST	CENTRAL	WEST	IRRIG			
Wheat, Barley, Rye		.2	.2	.1	.3			
Oats		.2	.2	.1	.3			
Corn		.4	.3	.2	.4			
Grain Sorghum		.3	.2	.2	.3			
Soybeans		.3	.2	.2	.3			
Sugar Beets		—	—	—	.5			
Other Cash Crops		—	—	—	.3			
Alfalfa		.8	.7	.3	.4			
Brome, Bermuda, Prairie		.3	.2	.2	.3			
Silage		.6	.5	.5	.5			
Temporary Pasture		.2	.1	.1	.2			
Summer Fallow		—	.1	.1	—			
TOTAL CROP MAN WORK DAYS (Add L. 47-58)		XXX	XXX	XXX	XXX	XXXXX		
LIVESTOCK	NO. OF HEAD	NO. OF MONTHS		STANDARD				
Beef Cows		XXXXXXX		.8				
Dairy Cows		XXXXXXX		6.0				
Swine—Litters (farrowing—weaning)		XXXXXXX		.3				
Feeder Pigs Raised		XXXXXXX		.05				
Feeder Pigs Purchased		XXXXXXX		.05				
Ewes		XXXXXXX		.4				
Feeder Lambs Purchased		XXXXXXX		.075				
Laying Hens/1000		XXXXXXX		20.0				
Winter Calf				.05				
Winter Graze				.04				
Background Drylot				.07				
Deferred Steers				.06				
Deferred Heifers				.05				
Summer Graze				.015				
Background Finish				.07				
Beef Finish				.07				
TOTAL LIVESTOCK MAN WORK DAYS (Add L. 61-78)	XXXXX	XXXXXXX		XXXXXXX				
TOTAL FARM MAN WORK DAYS (Add L. 59 & 79)	XXXXX	XXXXXXX		XXXXXXX				

TEST

3. Using the family unit described below by your instructor, calculate the amount of family and hired labor necessary to meet the labor requirement for the crop and livestock enterprise composing the farm, and using the form in question #2a.

   Family Unit Description -

4. Utilizing the form below, plan a monthly work schedule for the crop and livestock enterprises and farm described in question #2a.

5. Utilizing the form below, plan the acquisition of additional hired labor as needed to meet the labor requirements of the farm operations described in question #2a.

FARM MONTHLY WORK SCHEDULE LABOR REQUIRED

MONTHS		J	F	M	A	M	J	J	A	S	O	N	D	Yr.
Crop Enterprises	ACRES	Man Work Days Required												
1. 2. 3. 4. 5. Total Crop														
Livestock Enterprises	LITTERS	Man Work Days Required												
1. 2. 3. 4. 5. Total Livestock														
Overhead non crop - non livestock														
Total Farm														
Family Utilizable Hired Utilizable														
Additional Req.														

6a. Utilizing the procedures and data shown below in regard to the farm in question #2a, determine if the farm can afford to pay for the additional labor needed.

Farm Gross Income ____________________

Total Expenses ____________________

______________________ X 75% >

6b. Calculate the dollar quantity of additional gross income which the above farm must generate to justify an additional $______________ of hired labor, equivalent to one full-time hired man.

Return to Labor and Management ______________________

(__________________) = (______________) X (_________________) = (_______________)

6c. Calculate how many hours of labor must be saved by newly purchased equipment if the equipment costs and labor costs are shown as below:

Equipment Costs - ___________________

Labor Cost/Hr. -____________________

____________ ÷ ______________ = ___________________

LABOR MANAGEMENT

UNIT I

ANSWERS TO TEST

1. a. 5
    b. 4
    c. 6
    d. 1
    e. 3
    f. 2

2. Complete to the satisfaction of the instructor.
3. Complete to the satisfaction of the instructor.
4. Complete to the satisfaction of the instructor.
5. Complete to the satisfaction of the instructor.
6. a. Complete to the satisfaction of the instructor.
    b. Complete to the satisfaction of the instructor.
    c. Complete to the satisfaction of the instructor.

LABOR MANAGEMENT

UNIT II

HIRING AND KEEPING LABOR

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to list sources of farm labor, and to utilize correct procedures when hiring farm employees. The student should also be able to develop a job description for specific employee position, complete an employment application form, perform an employment interview, and formulate a wage and benefit agreement. Also, the student should be able to list factors involved in employer-employee relations, list requirements associated with juvenile farm employees, and recognize record requirements for farm employers. This objective will be considered achieved by completion of the assignment sheets and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, the student will be able to:

1. Match terms with definitions associated with hiring and keeping labor.
2. Develop a job description for a specific job title. (Assignment Sheet #1 and TM 1)
3. List four sources of farm labor. (TM 2)
4. Complete an employment application form. (Assignment Sheet #2 and TM 3)
5. Formulate an example of a good wage and benefit agreement. (Assignment Sheet #4 and TM 4)
6. List ten factors involved in maintaining a successful employer-employee relationship. (TM 5)
7. List three general requirements associated with employing juveniles. (TM 6)
8. List five farm employer labor record requirements and four agencies where information can be acquired regarding farm labor record requirements. (TM 7)

LABOR MANAGEMENT

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with information and assignment sheets and a copy of the publication, "Managing Hired Farm Labor", Cooperative Extension Service, K.S.U.
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Demonstrate procedures for working problems contained in Assignment Sheets, by supplying examples
7. Give Test
8. Assist student in implementing specific labor management plans to maximize profitability for his total operation
9. Plan and implement a field trip to the local Kansas Job Service Center or Employment Office
10. Plan and implement a "role playing" situation between class members and an employer

Students:

1. Read Objectives
2. Study Information Sheets
3. Demonstrate procedures for working problems contained in Assignment Sheets
4. Take Test
5. Formulate and implement an employer-employee labor policy agreement
6. Implement specific labor management plans to maximize profitability for the total operation
7. Participate in a field trip to the local Kansas Job Service Center or Employment Office

SUGGESTED ACTIVITIES

8. Participate in an employee-employer "role playing" classroom session

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters
    - TM 1 - Example Job Description
    - TM 2 - Employee Sources
    - TM 3 - Employment Application Form - Example
    - TM 4 - Example Wage and Benefit Agreement
    - TM 5 - Employer-Employee Relations
    - TM 6 - Juvenile Employment
    - TM 7 - Farm Labor Employer Record Requirements
4. Assignment Sheets
    - #1 - Job Description Development
    - #2 - Employment Application Form
    - #3 - Employment Interview Procedure
    - #4 - Wage and Benefit Agreement
5. Test
6. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. Kansas Farm Management Handbook, Department of Economics, Cooperative Extension Service, Kansas State Unviersity, Manhattan, KS.
2. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service.
3. The Farm Management Handbook, I.F. Hall and W.P. Mortenson, Interstate Printers and Publishers.
4. Leader Effectiveness Training L.E.T., Dr. Thomas Gordon, Wyden Books.

LABOR MANAGEMENT

UNIT II

INFORMATION SHEET

I. Terms and Definitions

A. Job Description - A detailed statement of the responsibilities, tasks and duties required of a prospective employee to fulfill the requirements of a specific employment position in a specific farming operation. (Transparency #1) (Assignment Sheet #1)

B. Employee Source - Farm and agriculture related publications, agriculture labor placement firms, government agriculture related organizations, and individuals which can consistently supply good quality agriculture employment prospects. (Transparency #2)

C. Employment Application Form - A pre-printed form on which all applicants for employment are required to list data pertaining to personal information, employment desired, education, former employers, experience qualifications, references, physical record and signature. This completed form can then be used to evaluate the employability of the applicant, as well as for a guide during the applicant's interview. (Transparency #3) (Assignment Sheet #2)

D. Employment Interview Procedure - When an applicant for employment has completed a written application for employment, the employer will use that application as a guideline to ask specific questions of the prospective employee. These questions should be of a nature to explain the applicant's reasons for seeking employment, educational accomplishments, employment record, and experience record. A job description should be used to explain the specific job vacancy which is under consideration. (Assignment Sheet #3)

E. Employment Post Interview Procedure - Once an applicant for employment has been interviewd and qualifies for sincere consideration as an employee, the employer should call the applicant's most recent employers and verify his employment record. The employer should ask questions of former employers dealing with the applicant's work record, moral character, integrity, honesty, and specific skills qualifying him for that particular job description.

F. Employment Decision Procedure - The employer must evaluate each employment applicant fairly and completely by carefully matching each applicant's qualifications to the particular job description for which he has applied, and then select the reimbursement plan to offer to the individual he feels is best qualified.

INFORMATION SHEET

G. Pre-employment Physical - Before a new employee is allowed to begin work, he should undergo a medical physical examination by a licensed physician. This eliminates later misunderstanding about physical conditions which existed prior to employment. The examination fee should be paid by the employer, and a record of the examination should be kept with the employee's application.

H. Employee Orientation - A specific job description should be used to explain to each new employee exactly what his responsibilities are and how he should perform to accomplish them. The specific organization and operation of the farm and its equipment should be included as to location of tools, supplies, etc.

I. Wage and Benefit Agreements - A specific written and jointly signed statement of the period covered by the employment, wages and hours, time off, paid vacation, sick leave, fringe benefits, job description, housing provided, termination notice, and grievance procedures. (Transparency #4) (Assignment Sheet #4)

J. Employer-Employee Relations - The continuous communication between an employer and his employees to create an atmosphere of team work so that they can most efficiently accomplish the mission of that specific farming operation. (Transparency #5)

K. Juvenile Employment - When an employee of less than 16 years of age is hired, them employer should be certain he is in compliance with the Agriculture and Child Labor Requirements under the Fair Labor Standards Act, as amended in 1966. Specific questions should be directed to the nearest Department of Labor Office. (Transparency #6)

L. Record Requirements - Employers of farm labor are required to maintain accurate records and to make periodic reports of work related illnesses, injuries and death. Minor injuries requiring only first aid treatment need not be noted. (Transparency #7)

EXAMPLE JOB DESCRIPTION

Responsibilities:

I. Communication with General Manager, Production Manager and Operations Manager (Headquarters)

Performance:

A. Attend weekly meeting with General Manager. Have all pertinent data for meetings as to what has been done, why, when. Go to all information meetings or have representative to the meetings on all changes of farming practices and equipment.

B. Inform secretary as to employees:

1. Days off
2. Sickness
3. Vacation

Inform production manager as to needed materials:

1. Fuel
2. Seed
3. Fertilizer
4. Repairs
5. Insecticide
6. Purchases

C. Unit Manager will keep main office informed of crop condition and any other information they want daily. Turn in required reports and information about corn crop and subordinates to main office on designated dates.

FARM UNIT MANAGER

Responsibilities:	Performance:
II. Supervise/Meet with Subordinates	A. Hold weekly meetings with subordinates to inform them on priorities of that week on what needs to be done and why. Formulate time-table to get needed work done. Unit Manager will be responsible for subordinate's work.
III. Report to headquarters on personnel, equipment, field and crops	A. Inform employees of what we are going to do and how, when, why, first thing every morning of work day. Report absentees, sickness, vacation of personnel before payday. Report equipment breakdowns as seriousness of operation. Report daily on fertilizer during that season. Report on planting as fields finished per bags of seed and insecticide used and date finished. Report on insect infestation during season. Report on rodents seasonal. Report yearly on implement usage on each field. Report condition of roads in need of maintenance. Report on condition of pickups and also in case of accidents.
IV. Supervise/Work/Maintenance of equipment for field readiness A. Tillage equipment and support vehicles B. Sprinklers	A. Unit manager will help get all equipment ready and make decisions as to what repairs are necessary on equipment and systems. Supervise/work at repair completed by April 1 on following equipment: Sprinklers, irrigation motors, fertilizer pumps, tractors, trucks, pickups, tillagers, mulch treaders, corn planters, cultivators, and harvest equipment. Supervise/work to repair planters, tillagers, mulch treaders, cultivators, tractors, pickups, combines, sprinkler systems in winter months. Prepare weekly list of equipment that needs repaired in shop, for bad weather only, 32 degrees and below. Make sure all equipment is ready for field use as to what season. To be done daily: 1. Tillagers 2. Corn Planters 3. Cultivators 4. Sprinklers 5. Irrigation Engines 6. Combines 7. Tractors 8. Grain Carts 9. Service Vehicles 10. Trucks

FARM UNIT MANAGER

Responsibilities:	Performance:
V. Supervise/work of field preparation. Operate equipment and maintanance of equipment	A. Supervise/work tillager. Work completed by April 25. Set and adjust tillager for field conditions. Set fertilizer pumps for gallons per acre. Supervise/work to operate tractors, tillagers, planters, mulch treaders, cultivators, sprinklers, combines, grain carts, trucks, pickups, and grease. Repair daily while being operated.
VI. Supervise/work maintenance of corn crop and planting	A. Supervise/work corn planter. Complete by May 25. Set mulch treader and herbicide pumps for gallons per acre. Operate and adjust corn planter for field conditions. Know condition of crop at all times, as to whether too wet, dry, insects, weed contamination, stress tolerance of plant, fertilizer application.
VII. Supervise/work of cultivation	A. Supervise/work at completing cultivation of corn before the plants are too tall. Set for field conditions and set fertilizer pump.
VIII. Supervise/work of sprinkler season	A. Supervise/work daily maintenance of motor. Daily immediate repair of down sprinkler. Amount and timing of fertilizer application. Start and stop speed of cycle of sprinkler.
IX. Supervise/work of harvest season	A. Supervise/work. Set and adjust silage cutter. Set and adjust combine for field conditions. Supervise grain cart and trucks.
X. Supervise/work of fall crops and corn harvest	A. Supervise/work. Set and adjust wheat drill for field conditions and mulch treader. Unit manager floats - check jobs of custom cutters and keeps in touch with main office.
XI. End of season review	A. Supervise/work clean-up of equipment as weather permits. Unit manager and subordinates review of past year records.

EMPLOYEE SOURCES

I. Farm and Agriculture Related Publications
   a. Local, state, regional or national farm magazines and newspapers
   b. Agriculture related magazines
   c. Local and regional newspapers

II. Agriculture Labor Placement Firms
   a. Very few are locally based, but more in the future
   b. Several are available on the state or regional level and most advertise in agriculture publications
   c. Many times a fee is necessary

III. Government Agriculture Related Organizations
   a. Local Job Service Center
   b. Kansas Division of Employment Service
   c. County or Area Agriculture Extension Office
   d. Area Community College Agriculture Programs
   e. Area Vocational Technical School Agriculture Program
   f. Local High School Vocational Agriculture Program

IV. Individuals
   a. Local farm organization leaders
   b. Local agriculture businessmen
   c. Local 4-H leaders
   d. Local vocational agriculture instructors

EMPLOYMENT APPLICATION FORM - EXAMPLE

Application for Employment

To help us learn about your experience, abilities, and interests, please complete this Application for Employment as thoroughly as possible. We will review your qualifications and will make every effort to reach a decision, based solely on merit, as quickly as possible. The information you provide will be considered confidential.

IMPORTANT

Please complete your application in black or dark blue ink, to facilitate reproduction of this form.

If you are a college graduate, please submit a grade transcript with your application.

Thank you for your cooperation

Personal Data

Please Print in Dark Ink or Type

Name Last First Middle Initial

Present Address Street

City State Zip Code

Telephone Area Code Number

Permanent Address * Street

City State Zip Code

Telephone Area Code Number

* Leave blank if same as present address

Your Job Requirements

Type of Work Desired

Work Location Desired

Salary Desired $ Per

The following conditions may be required at some point in a job assignment.
If required, would you be willing to work:

a. Shift Work? ☐ Yes ☐ No
b. Overtime Work? ☐ Yes ☐ No
c. Rotational Work Schedule? ☐ Yes ☐ No
d. Work Schedule Other than Monday through Friday? ☐ Yes ☐ No

When could you be available to begin work?

Check appropriate box for type of employment

☐ Regular ☐ Part-Time ☐ Temporary ☐ Summer ☐ Cooperative Education

FORMER EMPLOYERS (LIST BELOW LAST FOUR EMPLOYERS, STARTING WITH LAST ONE FIRST).

DATE MONTH AND YEAR	NAME AND ADDRESS OF EMPLOYER	SALARY	POSITION	REASON FOR LEAVING
FROM				
TO				
FROM				
TO				
FROM				
TO				
FROM				
TO				

CROP PRODUCTION EXPERIENCE - (corn, wheat, etc.)

Crop	Hybrid	Chemicals	Employer	Years

MACHINERY OPERATION EXPERIENCE - (tractor, tillager, mulch treader, harvesting, trucks)

Type	Brand	Model	Employer	Years

MECHANICAL ABILITIES AND/OR SKILLS - (gas or diesel engine and power train experience; oxyacetylene or arc welding; formal training)

Type	Specific Tools	Business or School Institution	Years

REFERENCES: GIVE THE NAMES OF THREE PERSONS NOT RELATED TO YOU, WHOM YOU HAVE KNOWN AT LEAST ONE YEAR

NAME	ADDRESS	BUSINESS	YEARS ACQUAINTED
1			
2			
3			

PHYSICAL RECORD:

DO YOU HAVE ANY PHYSICAL LIMITATIONS THAT PRECLUDE YOU FROM PERFORMING ANY WORK FOR WHICH YOU ARE BEING CONSIDERED? ☐ Yes ☐ No

PLEASE DESCRIBE

IN CASE OF EMERGENCY NOTIFY

NAME ADDRESS PHONE NO

"I CERTIFY THAT THE FACTS CONTAINED IN THIS APPLICATION ARE TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND UNDERSTAND THAT, IF EMPLOYED, FALSIFIED STATEMENTS ON THIS APPLICATION SHALL BE GROUNDS FOR DISMISSAL.

I AUTHORIZE INVESTIGATION OF ALL STATEMENTS CONTAINED HEREIN AND THE REFERENCES LISTED ABOVE TO GIVE YOU ANY AND ALL INFORMATION CONCERNING MY PREVIOUS EMPLOYMENT AND ANY PERTINENT INFORMATION THEY MAY HAVE, PERSONAL OR OTHERWISE, AND RELEASE ALL PARTIES FROM ALL LIABILITY FOR ANY DAMAGE THAT MAY RESULT FROM FURNISHING SAME TO YOU.

I UNDERSTAND AND AGREE THAT, IF HIRED, MY EMPLOYMENT IS FOR NO DEFINITE PERIOD AND MAY, REGARDLESS OF THE DATE OF PAYMENT OF MY WAGES AND SALARY, BE TERMINATED AT ANY TIME WITHOUT ANY PRIOR NOTICE."

DATE SIGNATURE

DO NOT WRITE BELOW THIS LINE

INTERVIEWED BY DATE

HIRED: ☐ Yes ☐ No POSITION DEPT.

SALARY/WAGE DATE REPORTING TO WORK

APPROVED: 1 2 3

EMPLOYMENT MANAGER DEPT HEAD GENERAL MANAGER

EXAMPLE WAGE AND BENEFIT AGREEMENT

WAGES:

All employees are paid a base monthly salary plus bonuses. Salaries are based on 365 days per year. Bonuses are to compensate for longer hours and Sundays worked during the summer. Wages and bonuses are confidential information.

VACATIONS, SICK LEAVE AND LEAVES OF ABSENCE:

Employees will have 2 weeks paid vacation per year. 1 week in summer and 1 week in winter. Both weeks can be taken together in the winter only - after harvest and before March 1. Employees will give 2 weeks notice of vacation time desired for approval by _______. All summer vacations must be coordinated with work schedules. Vacations will be for 7 consecutive days only.

Employees will be allowed one-half day per month sick leave or 6 days per year. Sick leave can be carried over into the next year.

Employees will be allowed to take 5 days per year leave-of-absence without pay. This should be reserved for emergencies only.

Any time off during working hours must be reported to the office and will be deducted from wages or accumulated as sick leave.

No vacations, sick leaves or leaves-of-absence will be allowed during the first 6 months of employment. Any leave taken during this first 6 months will be deducted from wages. Anything up to 3 days sick leave that has been deducted from wages during this period, will be reimbursed to the employee at the end of the first 6 months of employment.

SHOP USE:

The shop can be sued by employees for their own personal vehicles at the discretion of ________ depending on various circumstances. Shop use must also be approved by ____ or _______________ and one of these men must be present at all times during such use.

If shop use is approved, the following rules must be observed:

Shop can be used for personal vehicles after regular working hours only. No company owned parts or products will be used in personal vehicles and no parts will be sold to employees for personal use.

The vehicle must not be disabled to such an extent that it cannot be moved from the shop in case this necessity arises. No personal vehicles will be left in the shop overnight.

COMPANY VEHICLES:

Company vehicles will be used for company business only. Those employees allowed to keep vehicles at home at night will use them for transportation to and from work only. They will not be used for driving home for lunch or other personal uses. Any exceptions to this must be approved by Those employees living on the ________ Unit, who drive company vehicles, will house them in company buildings at night. All company vehicles will be housed in company buildings while the regular driver is on vacation or leave-of-absence.

Vehicle maintenance and cleanliness is each driver's responsibility. Any dents or scratches sustained must be reported and explained, in detail, in writing to ___________ office.

INSURANCE:

WORKMEN'S COMPENSATION covers work related accidents and injuries. These should be reported to the office as soon as possible. All such injuries must be reported on the proper forms.

BLUE CROSS AND BLUE SHIELD covers all injuries or illness resulting in hospitalization NOT sustained at work. These claims are usually made by the hospital and doctor's office.

Complete information on both Workmen's Compensation and Blue Cross-Blue Shield is available in the office for your inspection.

EMPLOYER -- EMPLOYEE RELATIONS

THE LIST SHOWN BELOW ARE THE BASICS OF HOW TO MAINTAIN GOOD EMPLOYER--EMPLOYEE RELATIONS:

STRIVE FOR GOOD COMMUNICATION

MANAGE BY SETTING OBJECTIVES

KNOW YOUR EMPLOYEES

LET YOUR EMPLOYEES KNOW WHERE THEY STAND AS TO EVALUATION

ASK YOUR EMPLOYEES FOR COUNSEL AND HELP

KEEP YOUR EMPLOYEES INFORMED AS TO NEW FARM DEVELOPMENTS

TAKE TIME TO LISTEN WHEN YOU ASK A QUESTION

SHOW CONFIDENCE IN YOUR EMPLOYEES

SET A HIGH STANDARD FOR YOURSELF AS WELL AS YOUR EMPLOYEES

BE CALM

BE COURTEOUS

BE CONSIDERATE

REQUEST RATHER THAN COMMAND OR DEMAND

JUVENILE EMPLOYMENT

The following paragraphs review briefly general information about Agriculture and the Child Labor Requirements under the Fair Labor Standards Act as amended in 1966. This information should be used only as a guide. Where specific questions arise, obtain official statements of the Department of Labor or consult the nearest Department of Labor Office.

Under current child-labor requirements:

1. A farmer may employ minors 16 years of age and over at any time in any agricultural occupation.
2. A farmer may not employ a minor under 16 years of age at any time in any agricultural occupation declared hazardous by the Secretary of Labor except:
    a. his own child on the home farm, or
    b. a child 14 to 15 years of age who has completed an educational or training program for which an exclusion has been obtained from the Secretary of Labor.
3. A child under 16 may not be employed in agriculture during school hours except by his parents on the home farm.

FARM LABOR EMPLOYER RECORD REQUIREMENTS

The following records are required:

A. Display of Safety and Health Protection On-the-Job Poster.

B. Keeping Records on File for Five Years.

C. Maintaining a Log of Occupational Injuries and Illnesses on OSHA Form 100.

D. Completing a Supplemental Record of Each Injury or Illness on OSHA Form 101.

E. Prepare an Annual Summary Report on OSHA Form 102.

Source of Additional Information:

1. U.S. Department of Labor
   Occupational Safety and Health Administration
   823 Walnut Street, Room 300
   Kansas City, Missouri 64106

   * Copies of Specific Standards
   * Record-keeping Requirements Bulletins

2. Director, Occupational Safety and Health Survey
   State Department of Health
   535 Kansas Avenue
   Topeka, Kansas 66603

3. Kansas Workman's Compensation Office
   State Office Building
   Topeka, Kansas 66612

4. County Extension Office

LABOR MANAGEMENT

UNIT II

ASSIGNMENT SHEET #1: Job Description Development

Perform Specific Objective #2 by developing a job description for an employment position in your own farming operation, utilizing the format shown below, or as directed by your instructor.

Job Title: ______________________________

Responsibilities:	Performance:
I. Attendance	
II. Equipment Operation per Each Enterprise	
III. Maintenance of Equipment	
IV. Supplies Management and Use	
V. Seasonal Activity	
VI. Personnel Supervision	
VII. Communication	
VIII. Miscellaneous	

UNIT II

ASSIGNMENT SHEET #2: Employment Application Form

Application for Employment

To help us learn about your experience, abilities, and interests, please complete this Application for Employment as thoroughly as possible. We will review your qualifications and will make every effort to reach a decision, based solely on merit, as quickly as possible. The information you provide will be considered confidential.

IMPORTANT

Please complete your application in black or dark blue ink, to facilitate reproduction of this form.

If you are a college graduate, please submit a grade transcript with your application.

Thank you for your cooperation

Personal Data

Please Print in Dark Ink or Type

Name Last First Middle Initial

Present Address Street

City State Zip Code

Telephone Area Code Number

Permanent Address * Street

City State Zip Code

Telephone Area Code Number

* Leave blank if same as present address

Your Job Requirements

Type of Work Desired

Work Location Desired

Salary Desired $ Per

The following conditions may be required at some point in a job assignment. If required, would you be willing to work:

a. Shift Work?	☐ Yes	☐ No
b. Overtime Work?	☐ Yes	☐ No
c. Rotational Work Schedule?	☐ Yes	☐ No
d. Work Schedule Other than Monday through Friday?	☐ Yes	☐ No

When could you be available to begin work?

Check appropriate box for type of employment

☐ Regular ☐ Part-Time ☐ Temporary ☐ Summer ☐ Cooperative Education

ASSIGNMENT SHEET #2

FORMER EMPLOYERS (LIST BELOW LAST FOUR EMPLOYERS STARTING WITH LAST ONE FIRST)

DATE MONTH AND YEAR	NAME AND ADDRESS OF EMPLOYER	SALARY	POSITION	REASON FOR LEAVING
FROM				
TO				
FROM				
TO				
FROM				
TO				
FROM				
TO				

CROP PRODUCTION EXPERIENCE - (corn, wheat, etc.)

Crop	Hybrid	Chemicals	Employer	Years

MACHINERY OPERATION EXPERIENCE - (tractor, tillager, mulch treader, harvesting, trucks)

Type	Brand	Model	Employer	Years

MECHANICAL ABILITIES AND/OR SKILLS - (gas or diesel engine and power train experience; oxyacetylene or arc welding; formal training)

Type	Specific Tools	Business or School Institution	Years

SG U2-22

ASSIGNMENT SHEET #2

REFERENCES: GIVE THE NAMES OF THREE PERSONS NOT RELATED TO YOU, WHOM YOU HAVE KNOWN AT LEAST ONE YEAR

NAME	ADDRESS	BUSINESS	YEARS ACQUAINTED
1			
2			
3			

PHYSICAL RECORD:

DO YOU HAVE ANY PHYSICAL LIMITATIONS THAT PRECLUDE YOU FROM PERFORMING ANY WORK FOR WHICH YOU ARE BEING CONSIDERED? ☐ Yes ☐ No

PLEASE DESCRIBE:

IN CASE OF EMERGENCY NOTIFY

NAME ADDRESS PHONE NO

"I CERTIFY THAT THE FACTS CONTAINED IN THIS APPLICATION ARE TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND UNDERSTAND THAT, IF EMPLOYED, FALSIFIED STATEMENTS ON THIS APPLICATION SHALL BE GROUNDS FOR DISMISSAL.

I AUTHORIZE INVESTIGATION OF ALL STATEMENTS CONTAINED HEREIN AND THE REFERENCES LISTED ABOVE TO GIVE YOU ANY AND ALL INFORMATION CONCERNING MY PREVIOUS EMPLOYMENT AND ANY PERTINENT INFORMATION THEY MAY HAVE, PERSONAL OR OTHERWISE, AND RELEASE ALL PARTIES FROM ALL LIABILITY FOR ANY DAMAGE THAT MAY RESULT FROM FURNISHING SAME TO YOU.

I UNDERSTAND AND AGREE THAT, IF HIRED, MY EMPLOYMENT IS FOR NO DEFINITE PERIOD AND MAY, REGARDLESS OF THE DATE OF PAYMENT OF MY WAGES AND SALARY, BE TERMINATED AT ANY TIME WITHOUT ANY PRIOR NOTICE."

DATE SIGNATURE

DO NOT WRITE BELOW THIS LINE

INTERVIEWED BY DATE

HIRED: ☐ Yes ☐ No POSITION DEPT.

SALARY/WAGE DATE REPORTING TO WORK

APPROVED: 1. 2. 3.

EMPLOYMENT MANAGER DEPT HEAD GENERAL MANAGER

LABOR MANAGEMENT

UNIT II

ASSIGNMENT SHEET #3: Employment Interview Procedure

Interview one of your classmates for the position which he applied for in Assignment Sheet #2. Utilize the job description he developed in Assignment Sheet #1, as well as his employment application in organizing the interview. (The instructor may wish to have selected individuals perform their interviews before the class as a group.)

General Outline	Comments
I. Personal Information	
II. Special Questions	
III. Employment Desired	
IV. Education	
V. Former Employers	
VI. Experience	
VII. References	
VIII. Physical Record	
IX. Job Description (Explanation of Position Available)	
X. Decision - (As to when applicant can expect final answer)	

LABOR MANAGEMENT

UNIT II

ASSIGNMENT SHEET #4: Wage and Benefit Agreement

Perform Specific Objective #5 by developing a good wage and benefit agreement for an employment position at your own farming operation, utilizing the format shown below, or as directed by your instructor.

JOB TITLE:______________________________

A. WAGES:

B. VACATIONS, SICK LEAVE, AND LEAVES OF ABSENCE:

C. SHOP USE:

ASSIGNMENT SHEET #4

D. COMPANY VEHICLES:

E. INSURANCE:

LABOR MANAGEMENT

UNIT II

TEST

1. Match the terms on the right to their proper definitions.

____a. A preprinted form on which all applicants for employment are required to list data pertaining to personal information, the employment desired, education, former employers, experience qualifications, references, physical record, and signature. This completed form can then be used to evaluate the employability of the applicant, as well as for a guide during the applicant's interview.

____b. When an employee of less than 16 years of age is hired, the employer should be certain he is in compliance with the Agriculture and Child Labor Requirements under the Fair Labor Standards Act as amended in 1966.

____c. A specificly written and jointly signed statement of the period covered by the employment, wages and hours, time off, paid vacation, sick leave, fringe benefits, job description, housing provided, termination notice, and grievance procedures.

____d. A detailed statement of the responsibilities, tasks, and duties required of a prospective employee to fulfill the requirements of a specific employment position in a specific farming operation.

____e. Employers of farm labor are required to maintain accurate records and to make periodic reports of work-related illness, injuries and death. Minor injuries requiring only first aid treatment need not be noted.

____f. When an applicant for employment has completed a written application for employment, the employer will use that application as a guideline to ask specific questions of the prospective employee. These questions shoud be of a nature to explain the applicant's reasons for seeking employment, educational accomplishments, employment record, and experience record. A job description should be used to explain the specific job vacancy which is under consideration.

1. Job Description
2. Employee Source
3. Employment Application Form
4. Employment Interview Procedure
5. Employment Post Interview Procedure
6. Employment Decision Procedure

TEST

____g. Before a new employee is allowed to begin work he should undergo a medical physical examination by a licensed physician. This eliminates later misunderstandings about physical conditions which existed prior to employment. The examination fee should be paid by the employer, and a record of the examination should be kept with the employee's application.

7. Juvenile Employment

____h. The employer must evaluate each employment applicant fairly and completely by carefully matching each applicant's qualifications to the particular job description for which he has applied, and then select the reimbursement plan to offer to the individual he feels is best qualified.

8. Employee Orientation

____i. Farm and agriculture related publications, agriculture labor placement firms, government agriculture related organizations, and individuals, which can consistently supply good quality agriculture employment prospects.

9. Wage and Benefit Agreements

____j. Once an applicant for employment has been interviewed and qualifies for sincere consideration as an employee, the employer should call the applicant's most recent employers and verify his employment record. The employer should ask questions of former employers, dealing with the applicant's work record, moral character, integrity, honesty, and specific skills qualifying him for the particular job description.

10. Employer-Employee Relations

____k. A specific job description should be used to explain to each new employee exactly what his responsibilities are and how he should perform to accomplish them. The specific organization and operation of the farm and its equipment should be included, as to location of tools, supplies, etc.

11. Pre-employment Physical

____l. The continuous communication between an employer and his employees, to create an atmosphere of team work so that they can most efficiently accomplish the mission of that specific farming operation.

12. Record Requirements

TEST

2. Develop a job description for the specific job title as shown below. (Specific instructions will be provided by the instructor). The format shown below should be utilized.

Job Title:________________________________

RESPONSIBILITIES	PERFORMANCE
I. Attendance	
II. Equipment Operation Per Each Enterprise	
III. Maintenance of Equipment	
IV. Supplies Management and Use	
V. Seasonal Activity	
VI. Personnel Supervision	
VII. Communication	
VIII. Miscellaneous	

3. List four specific sources of farm labor.

a.

b.

c.

d.

TEST

4. Complete Assignment Sheet #2 to the satisfaction of the instructor.

5. Complete Assignment Sheet #4 to the satisfaction of the instructor.

6. List ten factors involved in maintaining a successful employer-employee relationship.

   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.

   i.

   j.

7. List three general requirements associated with employing juveniles.

   a.

   b.

   c.

8. a. List five employer labor record requirements.

      a.

      b.

      c.

      d.

      e.

8. b. List four agencies where information can be acquired regarding farm labor employer labor record requirements.

      a.

      b.

      c.

      d.

LABOR MANAGEMENT

UNIT II

ANSWERS TO TEST

1. _3_ a.
   _7_ b.
   _9_ c.
   _1_ d.
   _12_ e.
   _4_ f.
   _11_ g.
   _6_ h.
   _2_ i.
   _5_ j.
   _8_ k.
   _10_ l.

2. Completed to the satisfaction of the instructor.

3. a. (Any which are included in the areas of farm and agriculture related publication, agriculture labor placement firms,
   b. government agriculture related organizations, individuals.)
   c.
   d.
   e.

4. Completed to the satisfaction of the instructor.

5. Completed to the satisfaction of the instructor.

6. a. Strive for Good Communication
   b. Manage by Setting Objectives
   c. Know Your Employees
   d. Let Your Employees Know Where They Stand as to Evaluation

ANSWERS TO TEST

6. e. Ask Your Employees for Counsel and Help

   f. Keep Your Employees Informed as to New Farm Developments

   g. Take Time to Listen When You Ask a Question

   h. Show Confidence in Your Employees

   i. Set a High Standard for Yourself as Well as Your Employees

   j. Be Calm

   k. Be Courteous

   l. Be Considerate

   m. Request Rather than Command or Demand

7. a. A farmer may employ minors 16 years of age and over at any time in any agricultural occupation.

   b. A farmer may not employ a minor under 16 at any time in any agricultural occupation declared hazardous by the Secretary of Labor except:

      1) his own child on the home farm, or

      2) a child 14 to 15 years of age who has completed an educational or training program for which an exclusion has been obtained from the Secretary of Labor.

   c. A child under 16 may not be employed in agriculture during school hours except by his parents on the home farm.

8. a. a. Display of Safety and Health Protection On-the-Job Poster.

      b. Keeping Records on File for Five Years.

      c. Maintaining a Log of Occupational Injuries and Illnesses on OSHA Form 100.

      d. Completing a Supplemental Record of Each Injury or Illness on OSHA Form 101.

      e. Prepare an Annual Summary Report on OSHA Form 102.

8. b. a. U.S. Department of Labor
   Occupational Safety and Health Administration
   823 Walnut Street, Room 300
   Kansas City, Missouri 64106
   * Copies of Specific Standards
   * Record-keeping Requirements Bulletins

ANSWERS TO TEST

8. b. b. Director, Occupational Safety and Health Survey
State Department of Health
535 Kansas Avenue
Topeka, KS 66603

c. Kansas Workman's Compensation Office
State Office Building
Topeka, KS 66612

d. County Extension Offices

LABOR MANAGEMENT

UNIT III

FARM LABOR MANAGEMENT

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to match terms and definitions associated with farm labor management, and demonstrate techniques of evaluation and motivation of farm employees to work in an effictive manner. This objective will be considered achieved by completion of the assignment sheet, and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms and definitions associated with farm labor management.
2. Demonstrate techniques of evaluation and motivation of farm employees.

LABOR MANAGEMENT

UNIT III

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheet and develop example data as required
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Demonstrate procedures for working problems contained in Assignment Sheet by supplying complete examples
7. Give Test
8. Assist student in designing specific farm annual work schedule objectives for his farm operation

Student:

1. Read Objectives
2. Study Information Sheet
3. Demonstrate procedures for working problems contained in Assignment Sheet
4. Take Test
5. Implement specific farm annual work schedule objectives for the farm operation

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheet

INSTRUCTIONAL MATERIALS

3. Assignment Sheet

   #1 - Evaluation and Motivation of Farm Employees -- Based on Job Description

4. Test

5. Answers to Test

References:

1. Kansas Farm Management State Summary and Analysis Report, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, Kansas.

2. Kansas Farm Management Handbook, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, Kansas.

3. Kansas Farm Account Book, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, Kansas.

4. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service.

5. The Farm Management Handbook, I. F. Hall and W. P. Mortenson, Interstate Printers and Publishers.

6. Leader Effectiveness Training, L.E.T., Dr. Thomas Gordon, Wyden Books.

LABOR MANAGEMENT

UNIT III

INFORMATION SHEET

I. Terms and Definitions

  A. Evaluation - To review, appraise and set a value on the accomplishment of labor by farm workers.

  B. Motivation - The inducement and incentive to perform work efficiently and effectively.

  C. Job Description - An outline of general responsiblities and duties of employment in a particular situation.

  D. Work Quantity - A measure of the amount of work which was performed.

  E. Work Quality - The degree to which the performance of work meets or exceeds the necessary standards.

  F. Work Attitude - The manner or disposition by which an individual perceives and performs work assignments.

  G. Work Habits - The performance of work in an acquired behavior pattern.

  H. Interpersonal Relations - Relationships with fellow workers and/or supervisors in the work situation.

  I. Supervisory Skills - The ability to direct and oversee others to accomplish desirable work goals.

LABOR MANAGEMENT

UNIT III

ASSIGNMENT SHEET #1: Evaluation and Motivation of Farm Employees -- Based on Job Description

(Note: Use the descriptive statements attached.)

Perform specific objective #2 by demonstrating techniques of evaluating and motivating farm employees to implement methods of accomplishing the farm annual work schedule objectives, as to priorities, utilizing the form shown below. The instructor will provide any specific instructions needed. Complete the procedures below by either using yourself as the employee being evaluated, one of your classmates, or select an employee of your farm operation.

Select a minimum of five (5) which best describe the employee's traits. Maximum number is governed by appropriateness. Correlate the number of the statements selected with the grade chart. EXAMPLE: Work Quantity

Statement	Grade	Average
1	5	
3	4	
11	3	4.2
18	5	5 | 21.0
20	4	
	21	

As above, average the grade to obtain the final score (4.2). On the scale below is given the rating to be entered on the evaluation sheet.

1-Unsatisfactory
2-Fair
3-Good
4-Very Good
5-Outstanding

Any score above .5 may be entered on the next level if you so choose.

REMEMBER:

1. Rate the employee in terms of the job he is performing, and then rate the performance of that job on the basis of what the employee has accomplished.

2. Rate the employee on performance covering the entire rating period and do not permit your judgment to be influenced by any single incident or operation.

ASSIGNMENT SHEET #1

3. Do not rely upon subjective impressions or guesswork when determining a rating. Deterrants to a good rating program include:

   (a) Prejudicial treatment in cases of personal friendship, or animosity between the grader and employee;

   (b) Supervisor's fear of alienating the employee, or supervisory attempts to build esteem and employee acceptance;

   (c) Supervisor's fear of too much or too little recognition of the employee which may result in the employee's promotion to a position equal to or above the supervisor, or the loss of the employee through resignation at an inopportune time;

   (d) Award ratings on the basis of standards set by other departmental supervisors. You are not fully aware of the circumstances with which other supervisors are involved and standards they may adopt.

4. Be completely fair. Good points should receive commensurate beneficial value by the employee, and unsatisfactory points should receive commensurate detrimental value by the employee.

ASSIGNMENT SHEET #1

WORK QUANTITY

Select appropriate statement, record number of statement on separate sheet for each employee and use grade chart to find average. If any part is false, the whole statement is false.

1. Produces as well under pressure as under normal conditions.
2. Low average volume of work for the particular job.
3. Sparks the work flow.
4. Marginal output, just enough to keep him out of trouble.
5. Output is uniformly above normal.
6. Definitely tries to produce a "bit more" than is required.
7. Constantly needs pushing.
8. Sets the pace for volume.
9. Contributes nothing to output beyond the minimum but does not slow it up.
10. Expedites work flow.
11. Rarely falls behind the average volume for his job.
12. Never does more than is demanded.
13. A retarding factor on the regular flow of work.
14. Capitalizes on improvements and suggestions and tends to keep increasing his output.
15. Makes and suggests improvements for improving work output.
16. Permits his own work to lag.
17. Normal production for the job.
18. Can handle additional assignments effectively.
19. Tends to resist suggestions for change and/or improvements.
20. Knows how to organize his work effectively.
21. Irregular and spotty output.
22. Keeps his share of work flowing.
23. Steady worker.
24. Needs occasional pushing.
25. Usually handles assignments quickly.

ASSIGNMENT SHEET #1

23. New routines learned quickly and easily.
24. Work generally accurate; usually acceptable.
25. Faulty judgment that continually injures final work.
26. No more than normal supervision required.
27. Work is accurate and can be accepted uniformly without question.
28. Repeated evidence of acceptable work.
29. Good judgment.
30. Effective application of knowledge.
31. Repeated evidence of careless work.
32. Repeated indications that the employee cannot handle the job.
33. Uniformly distinctive quality of performance.
34. Adequate knowledge of required job routines.
35. Capable of training others; own work quality sets good example for those being trained.
36. Lack of minimum neatness.
37. Completeness of work assignments.
38. Uses original approach to accomplish tasks.
39. Does not see alternatives to work problems.

ASSIGNMENT SHEET #1

WORK ATTITUDES

Select appropriate statement, record number of statement on separate sheet for each employee and use grade chart to find average. If any part is false, the whole statement is false.

1. Marked interest in work and in organization.
2. Unstable; cannot be relied upon.
3. Lacks ambition or interest.
4. Fairly adaptable.
5. Fairly stable; not easily upset.
6. Initiative; resourcefulness.
7. Willingness to accept difficult and disagreeable tasks.
8. Uncooperative.
9. Courteous and tactful.
10. Adaptable; easily adjusts himself.
11. Largely indifferent.
12. Solid dependability.
13. Temporarily interested, but quickly loses that interest.
14. Too individualistic to fit general patterns.
15. Complete dependability and reliability.
16. More interested in his paycheck than his work.
17. Accepts direction and authority grudgingly.
18. Resentful of direction, instruction, or of authority.
19. Easily upset or irritated.
20. Ability to reach objectives smoothly and easily.
21. Adapts self slowly.
22. Definite emotional stability.
23. Receptive to directions and to authority.
24. Cooperative to a high degree.

ASSIGNMENT SHEET #1

25. An agreeable personality.
26. Undependable.
27. Limited dependability.
28. Interested in work and organization.
29. Unadaptable; stubborn.
30. A definite loyalty to organization.
31. Stable; rarely upset.
32. Tries to cooperate.
33. An aggressive interest in one's work.
34. Definitely cooperative.
35. Places patient care above self.
36. Highly motivated to improve job and organization.
37. Feels "put upon" if schedule or work load changes.
38. Ignores the little extras that make the job better.
39. Is sincere and truthful at all points.
40. Dresses appropriately at all times.
41. Dress is unacceptable on occasions.
42. Dress is dirty, hair unkept, generally untidy, often.
43. Well-groomed, pride taken in appearance.

ASSIGNMENT SHEET #1

WORK HABITS

Select appropriate statement, record number of statement on separate sheet for each employee and use grade chart to find average. If any part is false, the whole statement is false.

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1. Shows good results for the time and energy expended.
2. Allows attention to be easily distracted from work.
3. Decidedly orderly and systematic.
4. Performs work in a merely routine fashion.
5. Irregular punctuality.
6. Satisfactory punctuality.
7. Devotes time and self to consistent productive effort.
8. Wastes time in non-work (non-productive) activities; ex: accepts personal calls on the job and spends long periods talking.
9. Exceedingly careful; yet energetic.
10. "clock watching".
11. Usually punctual.
12. Keeps work up to date; meets time schedules.
13. Uses privileges reasonably.
14. Excessive unexcused absence.
15. Always constructively applying himself.
16. Disturbs the work habits of others; ex: visits others' desks, work stations.
17. Makes little use of privileges.
18. Avoids waste; is generally careful about his material.
19. Wastes supplies; abuses organization property.
20. Free from irritating or annoying faults.
21. Subordinates self to the job.
22. Irregular attendance.
23. Attention seldom distracted from his work.
24. Consumes excessive time on trivial duties.
25. Unaffected by distractions.

ASSIGNMENT SHEET #1

26. Careless use of organization property.
27. Stimulates others by his example.
28. Annoys others because of disturbing personal habits; ex: gum snapping.
29. Conserves hospital property; is thrifty in use of materials.
30. Exerts reserve energy when need requires.
31. Regular attendance.
32. Abuse of privileges.
33. Keeps ahead of time schedules.
34. Excessive tardiness.
35. Applies himself to the work at hand.
36. Keeps busy without producing anything of consequence.
37. Works rapidly but effectively.
38. Loafing between assignments.
39. Satisfactory attendance.
40. Long coffee breaks taken.
41. Repeatedly forgets to clock in and out.
42. Is careless, causing accidents to self and others.

ASSIGNMENT SHEET #1

EMPLOYEE EVALUATION

Employee:_______________________ Date: ____________

Job:_______________________ Length of Service:____________

Date of Last Evaluation:____________ Anniversary Date:____________

The following summary evaluates the performance and attitudes of the above employee. The employee has seen this record and is aware of the statements used to arrive at this evaluation.

EVALUATION

1-Unsatisfactory
2-Fair
3-Good
4-Very Good
5-Outstanding

(Place the average number in the appropriate box)

	Unsatisfactory	Fair	Good	Very Good	Outstanding
1. Work Quality					
2. Work Quantity					
3. Work Attitude					
4. Work Habits					
5. Interpersonal Relations (if applicable)					
6. Supervisory Skills (if applicable)					

Any extremely high or low evaluation needs substantiation below:

Supervisor's Comments:_______________________

Employee's Comments:_______________________

Employee's Signature Date

Supervisor's Signature Date

LABOR MANAGEMENT

UNIT III

TEST

1. Match the terms on the right with their correct definition.

_____a. Evaluation	1. f.
_____b. Motivation	2. i.
_____c. Job Description	3. e.
_____d. Work Quantity	4. g.
_____e. Work Quality	5. a.
_____f. Work Attitude	6. h.
_____g. Work Habits	7. c.
_____h. Interpersonal Relations	8. d.
_____i. Supervisory Skills	9. b.

2. Demonstrate techniques of evaluation and motivation of farm employees.

LABOR MANAGEMENT

UNIT III

ANSWERS TO TEST

1. 5 a.
 9 b.
 7 c.
 8 d.
 3 e.
 1 f.
 4 g.
 6 h.
 2 i.

2. Complete to the satisfaction of the instructor.

MARKETING

UNIT I

SUPPLY AND DEMAND

TERMINAL OBJECTIVE

Upon completion of this unit, students will be able to distinguish between supply and demand in a market structure and to apply these rules to agriculture production and marketing decisions. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms associated with the concepts of supply and demand.
2. Name the four factors that affect agriculture production.
3. Identify the three basic types of problems confronting agriculture production.
4. State the law of supply.
5. Describe what four factors concern a supply schedule.
6. Name five factors that cause a change in supply.
7. Determine elasticity of demand.
8. Name the six ways production costs are classified.
9. Compute the costs of productions.
10. Construct a demand schedule.
11. State the law of demand.
12. Name nine factors that may cause a change in demand.
13. Describe a market demand.
14. State the rule of income elasticity of demand.
15. Name three general observations about the effect of income on the demand for food.

SPECIFIC OBJECTIVES

16. Compute price elasticity of demand.

17. Discuss in writing, the nature of demand for agricultural products.

18. Name three functions prices perform in our economy.

19. Name three factors that determine the price of a product.

20. Discuss in writing the effects of changes in demand and supply on price.

21. Name the four types of market structures present in agriculture marketing.

22. Distinguish the characteristics of the four types of market structures present in agriculture marketing.

MARKETING

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheets
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and turn into Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

TM 1 - A Supply Schedule

TM 2 - Factors Influencing Supply

TM 3 - Price and Income Elasticity of Demand

TM 4 - Computation of Production Costs

TM 5 - A Demand Schedule

TM 6 - A Change in Demand

TM 7 - Factors Influencing Demand

INSTRUCTIONAL MATERIALS

TM 8 - Computing Income Elasticity of Demand

TM 9 - Price Elasticity of Demand

TM 10 - Hypothetical Demand and Supply Schedule and Effects on Pricing

TM 11 - Market Structures

4. Assignment Sheets

#1 - Diagraming a Supply Schedule

#2 - Computing Elasticity of Supply

#3 - Diagraming Demand and Changes in Demand

#4 - Computing Income Elasticity of Demand

#5 - Computing Price Elasticity of Demand

5. Answers to Assignment Sheets

6. Test

7. Answers to Test

References:

1. Economics for Agriculturalists, Sjo, John. Grid Inc. Columbus, Ohio 1976.

2. Agricultural Finance, American Institute of Banking, 1969.

3. Doanes Farm Management Guide, Doane Agricultural Service, St. Louis, Missouri 1971.

4. Heinold Commodities, Inc., "Teaching Commodity Futures Successfully", Tulsa, Oklahoma.

5. The Economics of Agricultural Production, Witkowski and Wells, Alfred Publishing Co., Inc., Sherman Oaks, California 1979.

MARKETING

UNIT 1

INFORMATION SHEET

I. Terms and Definitions

A. Labor - The human effort, physical and mental, expended in the production process.

B. Land - The natural resource untouched by human effort. It is the total of the earth and water, the plants and animals and the minerals that existed in nature.

C. Capital - Goods and services saved from consumption, used by or as a part of the human agent in further production, including investment in improving the human resource.

D. Management - The organization and operation of affairs to achieve a predetermined objective.

E. Resources - Those items used in production such as labor, machinery, land and livestock. Synonyms are inputs and factors. The symbol "X" is used to represent resources.

F. Supply - The schedule of the quantities of a good or service producers are willing and able to sell at a given time at different price levels in a given market.

G. Law of Supply - State that the quantity of goods and services offered by producers on a market varies directly with price.

H. Elasticity of Supply - A measure of a percentage change in the quantity supplied resulting from a percentage change in price.

I. Technology - Knowledge applied to improve the marketing process.

J. Fixed Resources - Resources that do not vary as production changes.

K. Factors of Production - Land, labor, capital and management.

L. Variable Resources - Resources that vary as production changes.

M. Production - The transformation of two or more resources (factors of production) into one or more products.

N. Demand - A schedule of the quantities of a good or service the consumer is willing and able to but at a given time and place at different prices.

O. Income Elasticity of Demand - The measure of a change in consumption of a good resulting from a change in income.

INFORMATION SHEET

P. Law of Demand - Consumer will buy a larger quantity as price is reduced.

Q. Price Elasticity of Demand - The measure of a percentage change in quantity demanded relative to a percentage change in price.

R. Price - The per unity market value of a good or service.

S. Market - A place where buyers and sellers come together to exchange goods and services.

T. Marketing - The exchange of ownership and price determination in a market.

U. Market Structure - The degree of competition in the market.

V. Cash Costs - Costs that require an out-of-pocket expenditure; the exchange of money, including checks, for resources.

W. Noncash Costs - Costs that do not require cash settlement. For example, wages for one's own labor.

X. Opportunity Cost - Potential income foregone from a resource as a result of using the resources for another line of production.

Y. Variable Costs - Costs that can be changed during the production period.

Z. Fixed Costs - Costs arising from using resources that are used even if no production is undertaken and whose quantity cannot be changed during the production period.

AA. Total Variable Cost (TVC) - The sum of all variable costs.

BB. Total Fixed Cost (TFC) - The sum of all fixed costs.

CC. Total Cost (TC) - The sum of all fixed costs plus the sum of all variable costs. $TC = TFC + TVC$

DD. Average Total Cost (ATC) - $\frac{TC}{Y}$

EE. Average Variable Cost (AVC) - $\frac{TVC}{Y}$

FF. Average Fixed Costs (AFC) - $\frac{TFC}{Y}$

GG. Marginal Cost - The change in total cost associated with producing one more unit of output.

INFORMATION SHEET

HH. Economics of sale - The reduction in per unit output costs as output is increased.

II. Monopolistic Competition - A market structure with many producers each able to influence price, but with little effect on the actions of his competitors.

JJ. Monopoly - A market structure in which only one firm produces and sells a product for which there is no substitute.

KK. Oligopoly - A market structure with few producers who can influence price and the actions of their competitors.

LL. Perfect Competition - A market structure characterized by a large number of buyers and sellers with no seller or buyer being able to influence price.

II. Factors Affecting Agricultural Production

A. Land

B. Labor

C. Capital

D. Management

III. Three Basic Agricultural Production Problems

A. How much to produce

B. How to use resources for production

C. What to produce

IV. The Law of Supply

The quantities of goods and services offered by producers on a market varies directly with price.

V. Factors Concerning a Supply Schedule (TM 1)

A. Represents responsiveness of producer to various product prices.

B. Quantity moves in the same direction as price.

C. Supply curve is upward sloping.

D. Price determined where we know how consumers and producers respond to price.

INFORMATION SHEET

VI. Five Factors Causing a Change in Supply (TM 2)

A. A change in the price of inputs

B. A change in the price of other products

C. A change in the producer price expectations

D. A change in the number of producers

E. A change in technology

VII. Elasticity of Demand (TM 3)

A. Formula for price elasticity of demand:

$$ES = \cfrac{\cfrac{Q_1 - Q_2}{Q + Q_2}}{\cfrac{P_1 - P_2}{P_1 + P_2}}$$

Note: (Q=Quantity; P=Price. Elasticity of supply greater than 1 is elastic; unit elastic is equal to 1, and inelastic if less than 1.)

B. Formula for income elasticity of demand:

$$EI = \cfrac{\cfrac{Q_1 - Q_2}{Q + Q_2}}{\cfrac{I_1 - I_2}{I_1 + I_2}}$$

C. Useful when trying to estimate output of a farm product when prices change.

D. Helps determine the amount farmers will increase output of that product when its prices rise.

VIII. Classification of Production Costs

A. Cash

B. Non-cash

C. Opportunity

D. Fixed

E. Variable

F. Marginal

INFORMATION SHEET

IX. Computation of Costs of Production (TM 4)

A. Total fixed costs (TFC)= sum of all fixed costs

B. Total variable costs (TVC)= sum of all variable costs

C. Total costs (TC) = TFC + TVC

D. Average fixed costs (AFC) = $\frac{TFC}{Y}$

Note: (Y = units of outputs)

E. Average variable costs (AVC) = $\frac{TVC}{Y}$

F. **Average** total costs (ATC) = $\frac{TC}{Y}$

G. Marginal costs (MC) = $\frac{TC}{Y}$

Note: (means change in total costs from the change in one unit of of output)

X. A Demand Schedule (TM 5)

A demand schedule is a schedule of prices and quantities of a good or service a consumer is willing and able to buy.
Note: (A movement from one point to another on the demand schedule does not represent a change in demand; a new schedule has to be determined to represent a change in demand.

XI. The Law of Demand

Consumers will buy a larger quantity as price is reduced

XII. Nine Factors That May Cause a Change in Demand (TM 6)

A. Change in consumer wants

B. Disposable income change

C. Change in family situation

D. Substitute Product Becomes Available

E. Change in weather

F. Occurance of holidays

G. Prices of other products

H. Consumers propensity to save

I. Producer influence change (advertising)

INFORMATION SHEET

XIII. Market Demand (TM 7)
The total of all the individual demand schedules for the product represents the market demand for that good or service

XIV. Income Elasticity of Demand (TM 8)

The measure of a change in consumption of a good resulting from a change in income.
Note: (Income elasticity can be thought of as consumer responce to changes in income)

XV. Effect of Income on Demand for Food

A. The poorer a family, the higher will be the portion of its income spent of food

B. As income changes, food consumption will change in the same direction.

C. As income changes, the purchased food items change

XVI. Price Elasticity of Demand (TM 9)

A. The measure of a percentage change in quantity demanded relative to a percentage change in price

B. Price elasticity of demand = $\frac{\text{\% change in quantity}}{\text{\% change in price}}$

or

$$ED = \frac{\dfrac{Q_1 - Q_2}{Q_1 + Q_2}}{\dfrac{P_1 - P_2}{P_1 + P_2}}$$

XVII. Nature of Demand for Agriculture Products

Note: (Most agricultural products, particularly food, are considered to be necessities)
Necessities tend to have:

A. An income elasticity of demand that is relatively elastic at low income levels and less elastic at higher income levels.

B. A price elasticity of demand that is relatively inelastic.

C. A higher price and income elasticity at the retail that at the producer level.

D. A high degree of variation among products for both price and income level.

INFORMATION SHEET

Note: (The U.S. consumer's income elasticity of demand for food is inelastic, about .3 which means that 1 percent increase in income results in .3 percent increase in expenditures on food.)

XVIII. Three Function of Prices

A. Guide and regulate consumption

B. Guide and regulate production

C. Guide and regulate distribution of income among owners of production resources

XIX. Three Factors That Determine the Price of a Product

A. The supply of the commodity

B. The demand for the commodity

C. The general price level

XX. Effect of Changes in Demand and Supply on Price (TM 10)

A. Prices will rise if:
1. Demand increases and there is no change in supply
2. Supply decreases and there is no change in demand
3. Supply decreases and demand increases.

B. Prices will fall if:
1. Demand decreases and there is no change in supply
2. Supply increases and there is no change in demand
3. Supply increases and demand decreases

C. Prices may either rise, fall, or remain the same depending on the size of change when demand and supply move in the same direction if: if:
1. Both demand and supply decreases
    a. Price will rise if supply decreases relatively more than demand decreases
    b. Price will fall if supply decreases relatively less than demand increases
    c. Price will remain the same if supply decreases the same as demand decreases
2. Both demand and supply increase
    a. Price will rise if demand increases relatively more than supply increases
    b. Price will fall if demand increases relatively less than supply increases
    c. Price will remain the same if demand increases the same as supply increases.

XXI. Four Types of Market Structures

A. Perfect Competition - competion among many

B. Monopoly - Monopsony - no competition

INFORMATION SHEET

C. Oligopoly - competition among a few

D. Monopolistic Competition - competition among many

XXII. Characteristics of the Market Structure (TM 11)

A. Perfect Competition

1. Such a large number of individual sellers that no one seller can influence price or, from the buying viewpoint, such a large number of buyers no one buyer can influence the price.
2. Sellers and buyers, all who have both equal and perfect knowledge of all market conditions.
3. All sellers offering a nearly identical product so that any seller's product is a perfect substitute for any other seller's product.
4. No restrictions on entry or exit of producers and resources to or from the industry.
5. Sellers and buyers who behave in an economically rational manner, that is, they try to maximize their own self interest.
6. No effective collusion among either buyers or sellers. Note: (Such industries usually seek ways to make their market less competitive by forming cooperatives, market orders, requesting legislation, and finding other market restraints).

B. Monopoly

1. There is only one firm and by determining the amount produced, it can affect prices.
2. There are no close substitutes for the products.
3. There is not freedom for new firms to begin producing the product; through control of the market or raw materials the existing firm can prevent new entries. Note: (Monopolies in U.S. are illegal. Examples: Public utilities, post office, public road system. May occur at a given situation, i.e., the 24-hour grocery store from 10:00 p.m. to 7:00 a.m.; a doctor in an isolated community).

C. Oligopoly

1. A small number of large firms producing or buying enough to affect prices and the pricing policies of other firms.
2. The product produced has no close substitutes. If there are close substitutes, such as automobiles, the firm will attempt, through advertising and promotion, to convince consumers that there are differences among the cars.
3. There is a limited entry into the industry by new firms; entry is limited by capital investment requirements, market organization needs, control of patents and raw materials by existing firms, and the economics of scale advantages of established firms.

INFORMATION SHEET

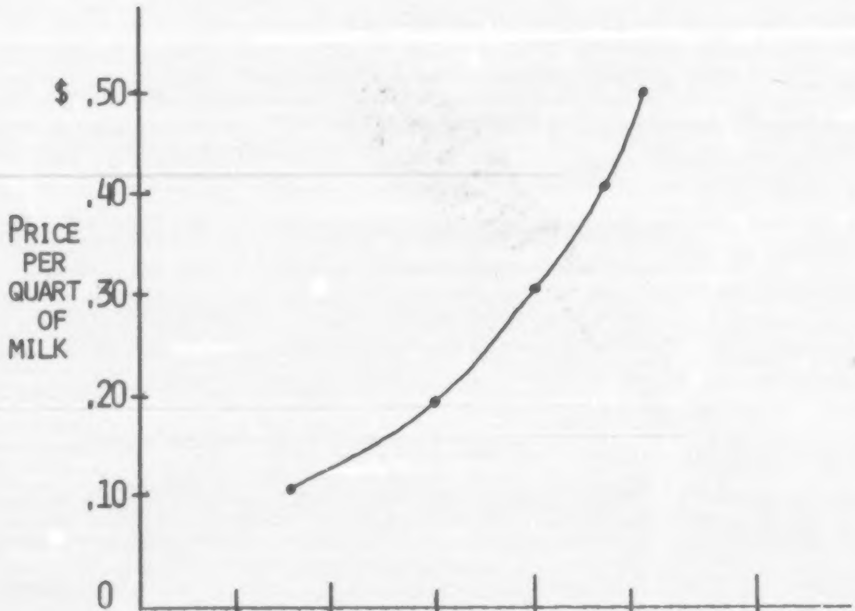
4. Examples are agriculture producers of cereal grains, textile processors, milk producers, and manufacturers of automobiles, electrical appliances, petroleum products, fertilizers and farm machinery.

D. Monopolistic Competition

1. Many small firms, each producing a small portion of the total industry output which have little influence on the price.
2. Output among firms not highly standardized. The output of each is a fairly good substitute for the output of others; the firms, through promotion and advertising, attempt to convince consumers there is a real difference.
3. Little or no collusion among firms; each generally ignores the existence of other firms.
4. Little restriction for new firms entering the industry. Note: (Example: clothing industry, furniture industry, some food processing industry).

A SUPPLY SCHEDULE

PRICE (PER QUART OF MILK)	QUANTITY (QUARTS OF MILK)
$.50	1000
.40	875
.30	725
.20	550
.10	310



QUARTS OF MILK OFFERED FOR SALE

FACTORS INFLUENCING SUPPLY

A. A change in the price of inputs

B. A change in the price of other products

C. A change in the producer price expectations

D. A change in the number of producers

E. A change in technology

PRICE AND INCOME ELASTICITY OF DEMAND

$$E_S = \frac{\dfrac{Q_1 - Q_2}{Q_1 + Q_2}}{\dfrac{P_1 - P_2}{P_1 + P_2}}$$

INCOME ELASTICITY OF DEMAND CAN BE COMPUTED BY:

$$\text{INCOME ELASTICITY OF DEMAND} = \frac{\text{\% CHANGE IN CONSUMPTION (S)}}{\text{\% CHANGE IN INCOME (S)}}$$

OR

$$E_1 = \frac{\dfrac{Q_1 - Q_2}{Q_1 + Q_2}}{\dfrac{I_1 - I_2}{I_1 + I_2}}$$

SH U1-17

COMPUTATION OF PRODUCTION COSTS

Total fixed cost = Sum of all fixed costs.

Total variable costs = Sum of all variable costs.

Total cost = Sum of all fixed and variable costs.

or

$$TC = TFC + TVC.$$

$$\text{Average fixed costs} = \frac{\text{Total fixed costs}}{\text{Units of output}}$$

or

$$AFC = \frac{TFC}{Y.}$$

$$\text{Average variable costs} = \frac{\text{Total variable costs}}{\text{Units of output}}$$

or

$$AVC = \frac{TVC}{Y}$$

$$\text{Average total cost} = \frac{\text{Total costs}}{\text{Units of output}}$$

or

$$ATC = \frac{TC}{Y}$$

$$\text{Marginal cost} = \frac{\text{Change in total costs}}{\text{Change in output}}$$

or

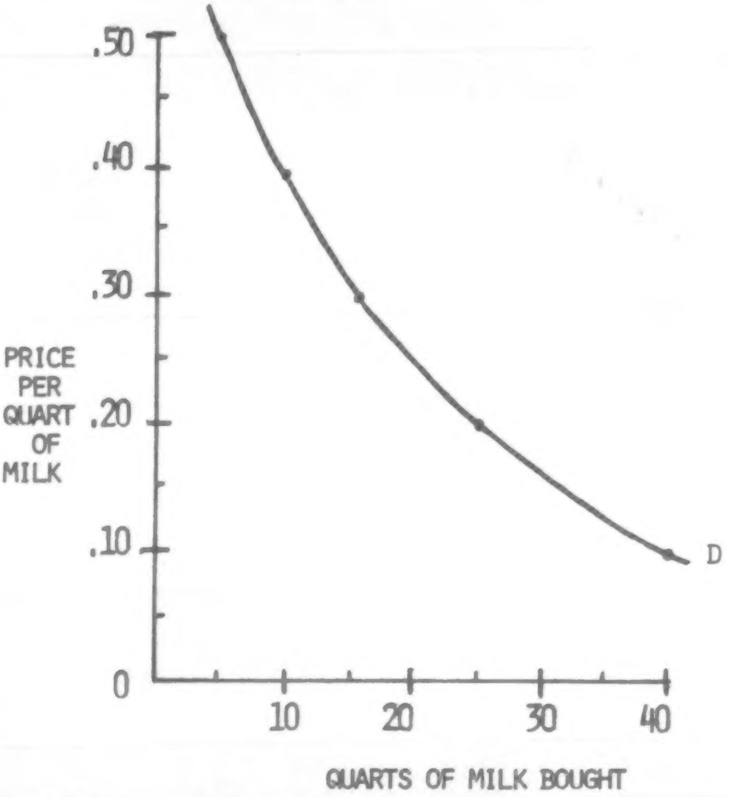
$$MC = \frac{ATC}{AY}$$

A DEMAND SCHEDULE

A CONSUMER'S DEMAND SCHEDULE FOR MILK

PRICE (PER QUART OF MILK)	QUANTITY BOUGHT (QUARTS OF MILK)
.50	6
.40	10
.30	15
.20	23
.10	40

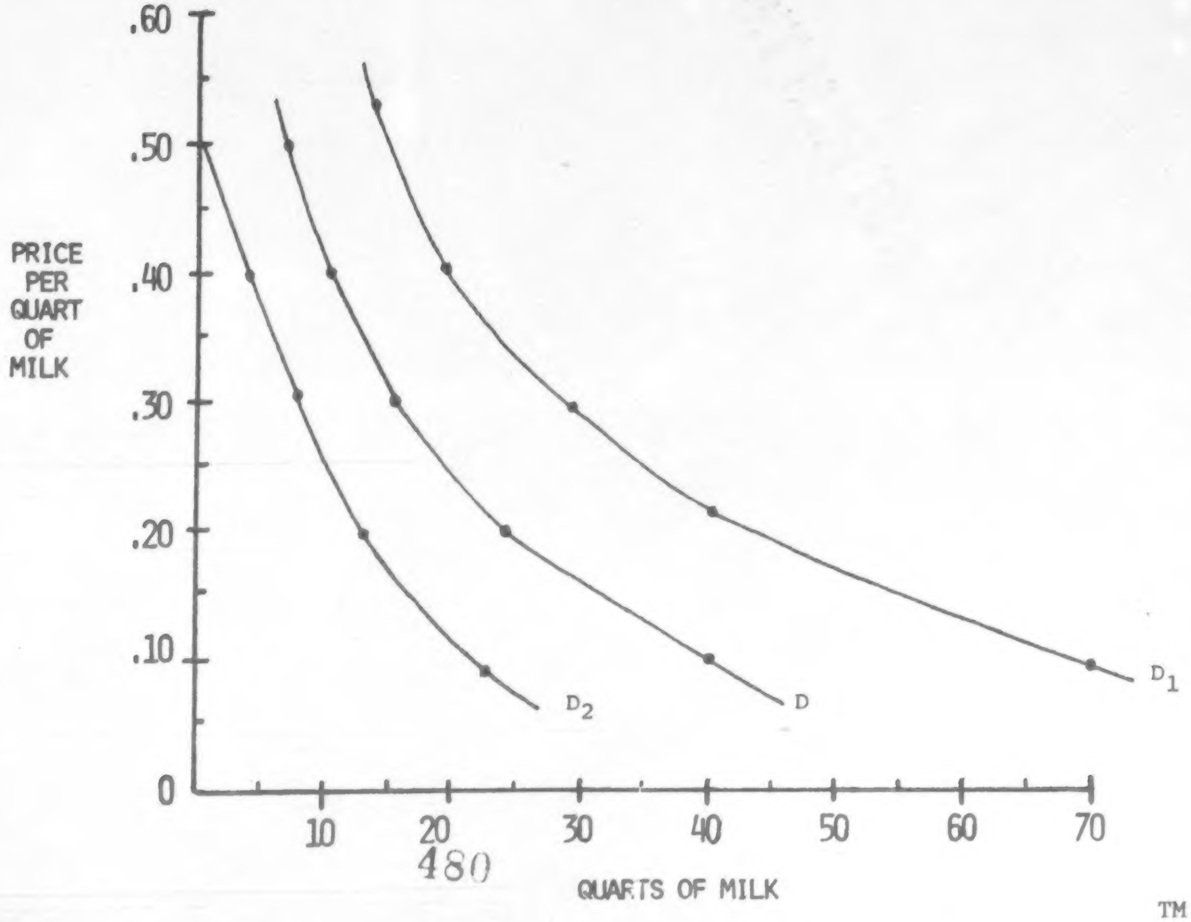
BY PLOTTING QUANTITIES PURCHASED AGAINST PRICE WE CAN SHOW THE DEMAND SCHEDULE AS A DEMAND CURVE, WHICH HELPS US VISUALIZE THE PRICE-QUANTITY RELATIONSHIP.



A CHANGE IN DEMAND

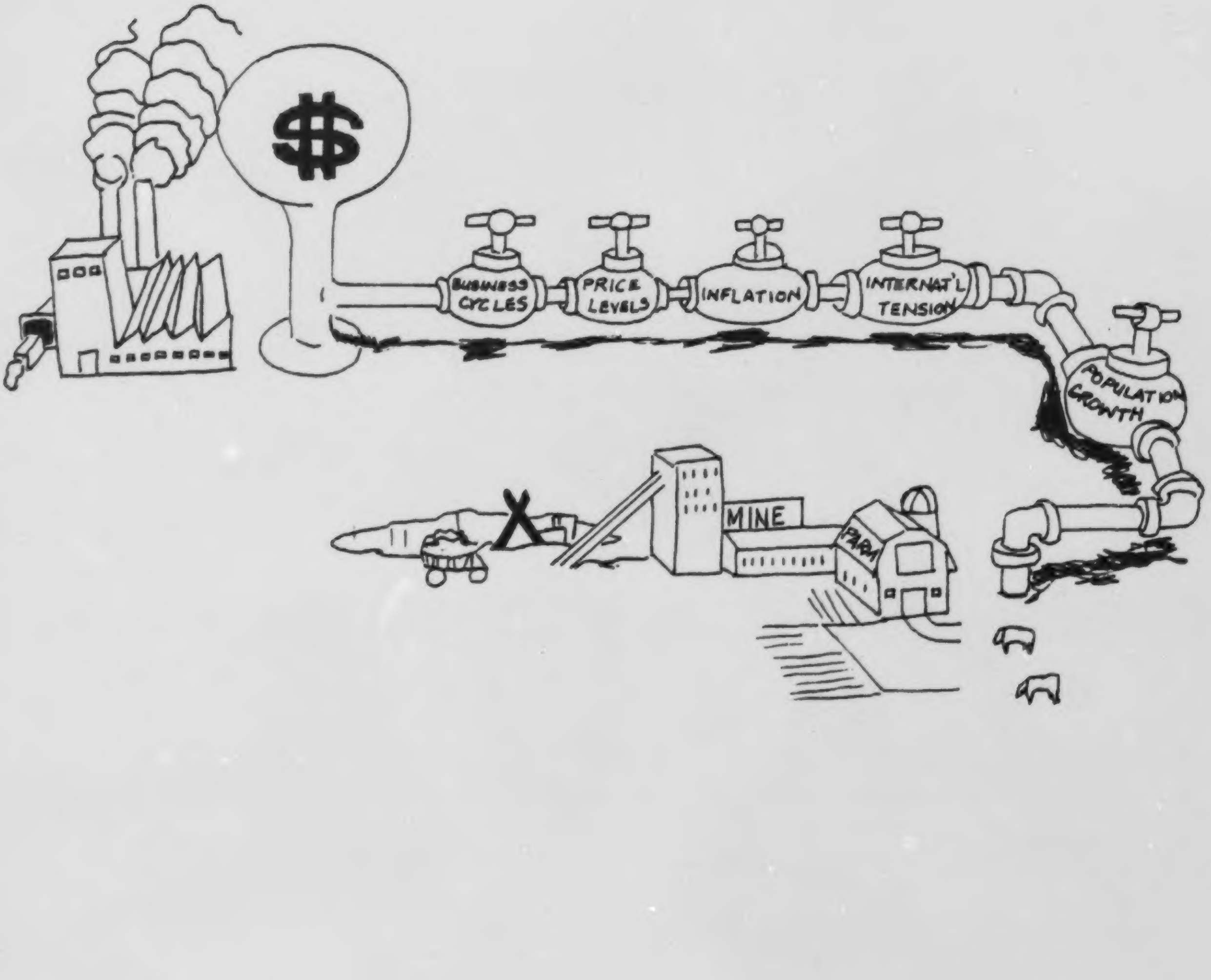
A CHANGE IN DEMAND

PRICE OF MILK	QUANTITY OF MILK (QUARTS)	CHANGE IN DEMAND FOR MILK D1 INCREASE (QUARTS)	D2 DECREASE (QUARTS)
.50	6	12	1
.40	10	20	3
.30	15	28	8
.20	23	40	12
.10	40	68	23



480

FACTORS INFLUENCING DEMAND



COMPUTING INCOME ELASTICITY OF DEMAND

$$E_I = \cfrac{\cfrac{Q_1 - Q_2}{Q_1 + Q_2}}{\cfrac{I_1 - I_2}{I_1 + I_2}}$$

PRICE ELASTICITY OF DEMAND

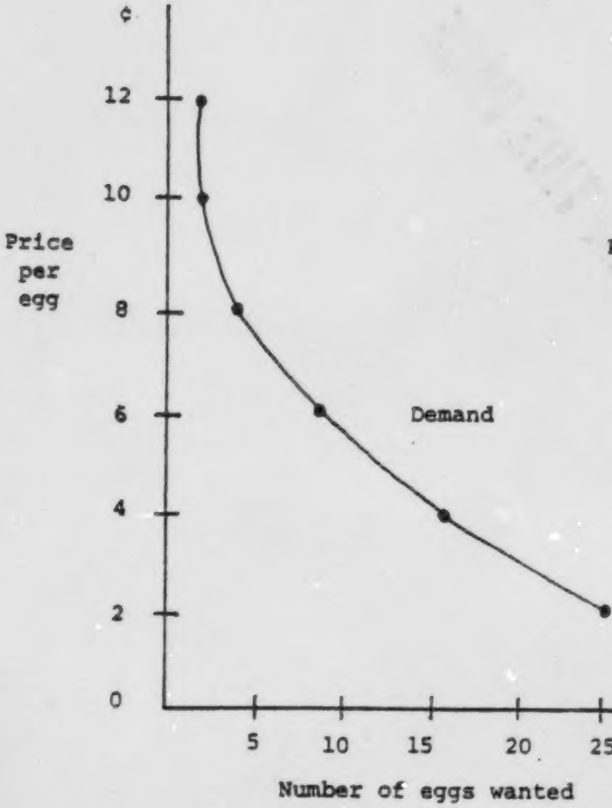
$$\text{PRICE ELASTICITY OF DEMAND} = \frac{\text{\% CHANGE IN QUANTITY}}{\text{\% CHANGE IN PRICE}}$$

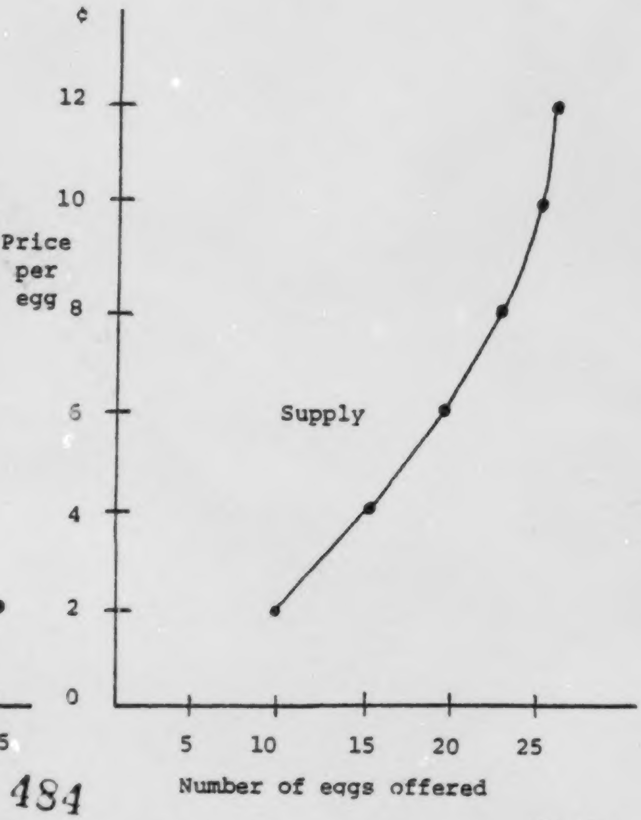
OR

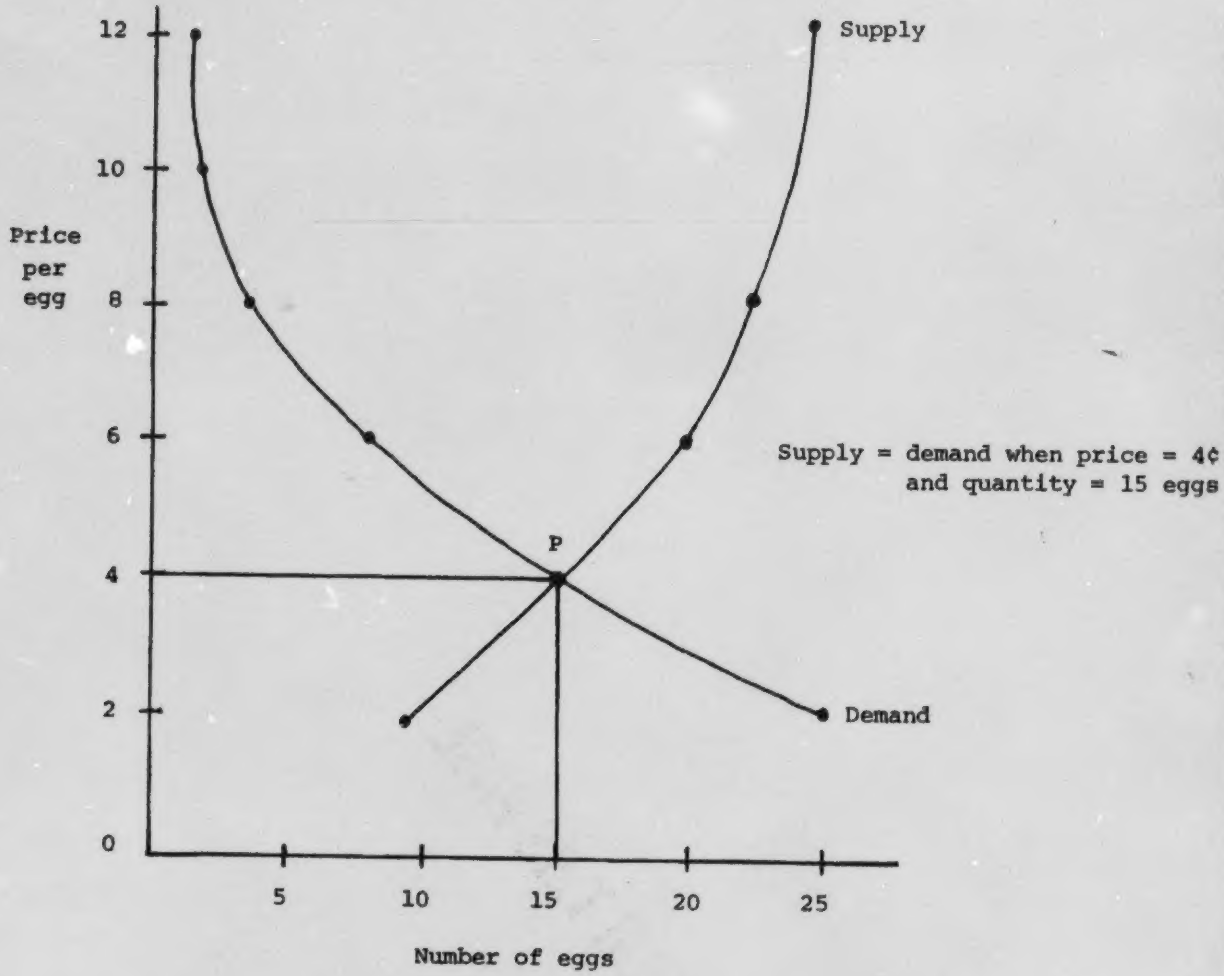
$$E_D = \frac{\dfrac{Q_1 - Q_2}{Q_1 + Q_2}}{\dfrac{P_1 - P_2}{P_1 + P_2}}$$

HYPOTHETICAL DEMAND AND SUPPY SCHEDULE AND EFFECTS ON PRICING

NUMBER OF EGGS	WANTED (DEMAND)	NUMBER OF EGGS OFFERED FOR SALE (SUPPLY)	
PRICE PER EGG	NUMBER OF EGGS	PRICE PER EGG	NUMBER OF EGGS
$.02	25	$.02	10
.04	15	.04	15
.06	10	.06	20
.08	5	.08	22
.10	3	.10	24
.12	1	.12	25







Price Determination of Eggs

MARKET STRUCTURES

TPYE OF MARKET STRUCTURE	NUMBER OF SELLERS	EFFECT OF ONE SELLER ON OTHER SELLERS	EFFECT OF ONE SELLER ON HIS PRICE	AVAILABILITY OF SUBSTITUTE PRODUCTS	EASE OF ENTRY TO THE MARKET
	ANSWER				
PERFECT COMPETITION	LARGE NUMBER	NONE	NONE	PRODUCT OF ALL OTHER SELLERS IS A PERFECT SUBSTITUTE	FREE ENTRY
MONOPOLISTIC COMPETITION	MODERATE NUMBER	NONE	CAN INFLUENCE HIS PRICE	PRODUCT OF ALL OTHER SELLERS IS A GOOD SUBSTITUTE	FEW RESTRAINTS TO ENTRY
OLIGOPOLY	SMALL NUMBER	DOES AFFECT ACTIONS OF OTHER SELLERS	CAN INFLUENCE HIS PRICE	SELLER TRIES TO DIFFERENTIATE HIS PRODUCT	MANY RESTRAINTS TO ENTRY
MONOPOLY	ONE	THERE ARE NO OTHER SELLERS	SETS OWN PRICE	NO SUBSTITUTE PRODUCTS	ENTRY OF OTHER FIRMS NOT POSSIBLE

MARKETING

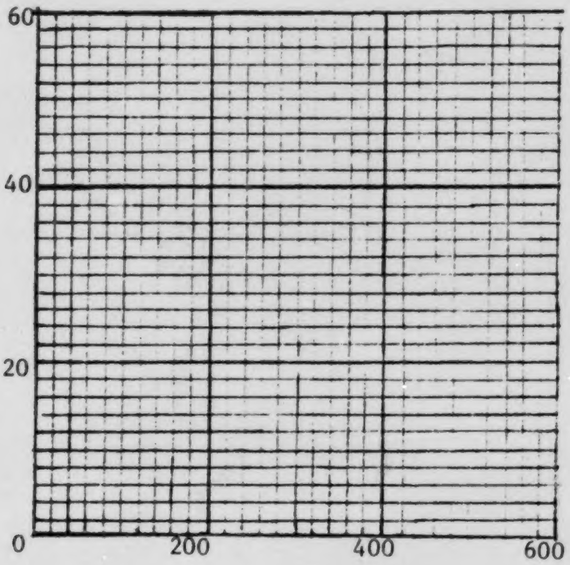
UNIT 1

ASSIGNMENT SHEET #1: DIAGRAMING A SUPPLY SCHEDULE

Table 1. An individual supply schedule for sweet potatoes

Price per pound	Quantity offered in tons	Answer Quantity offered in tons Increase	Decrease
$.60	450	600	300
.50	400	550	260
.40	350	500	220
.30	300	425	160
.20	250	350	100
.10	150	250	20

a. Using the information given above, prepare a diagram of the supply schedule.



b. Show an increase and a decrease in supply in Table 1 and on the diagram.

MARKETING

UNIT 1

ASSIGNMENT SHEET #2: COMPUTING AN ELASTICITY OF SUPPLY

Table 1: Computation of elasticity of supply

Price per unit	Quantity offered	Elasticity of supply	Types of elasticity
		Answer	
$10.00	525	--	--
9.00	425	2.00	elastic
8.00	350	1.65	elastic
7.00	306.25	1.00	unitary
6.00	286.25	.44	inelastic
5.00	275	.22	inelastic

a. Give the formula for computing elasticity of supply.

b. Compute the price elasticity of demand and enter in Table 1. Show all work.

c. Show when supply is elastic in Table 1.

MARKETING

UNIT 1

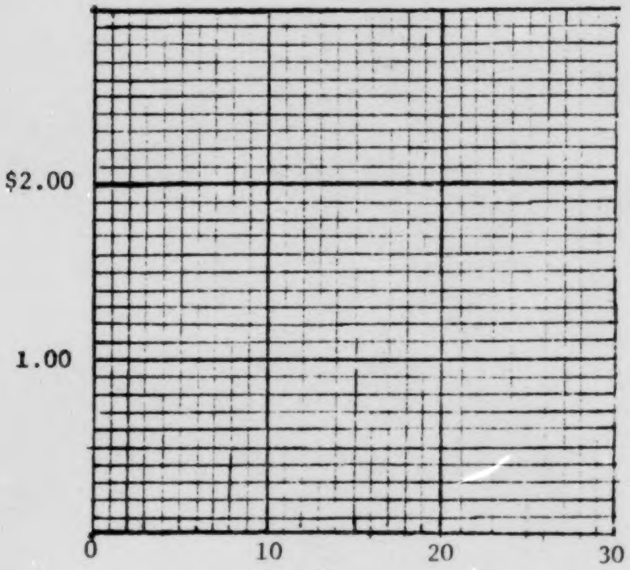
ASSIGNMENT SHEET #3: DIAGRAMING DEMAND AND CHANGES IN DEMAND

Table 1. The demand for carnations

Price per flower (P)	Number bought (Q)	Number bought to illustrate changes in demand Increase	Decrease
		Answer	
$2.00	1	5	0
1.75	2	6	0
1.50	3	9	1
1.25	5	12	2
1.00	8	15	4
.75	12	19	8
.50	17	25	14
.25	25	30	23

a. Define demand.

b. Using graph paper. diagram the demand for carnations.



ASSIGNMENT SHEET #3

c. Show an increase and a decrease in demand in Table 1 and on the diagram.

d. Using the above demand schedule, explain the law of demand.

MARKETING

UNIT 1

ASSIGNMENT SHEET #4: COMPUTING INCOME ELASTICITY OF DEMAND

Table 1. Income elasticity of demand for potted plants

Family income (I)	Family expenditure on potted plants (Q)	Income elasticity of demand Answer
$ 6,000	$ 20	--
9,000	30	1.000
13,500	60	1.665
20,250	160	2.273
30,375	300	1.52

a. Give the formula for computing income elasticity of demand.

b. Compute the income elasticity of demand. Show all work.

MARKETING

UNIT 1

ASSIGNMENT SHEET #5: COMPUTING PRICE ELASTICITY OF DEMAND

Table 1. Price elasticity of demand for bacon.

Price per pound of bacon ($)	Bacon bought weekly (pounds)	Price elasticity of demand	Type of elasticity --	Total revenue ($)
		Answer		
2.00	0.5	--	--	1.00
1.75	1.0	-5.04	elastic	1.75
1.50	2.0	-4.32	elastic	3.00
1.25	4.0	-3.66	elastic	5.00
1.00	5.0	-1.00	unitary	5.00
.75	6.5	- .909	inelastic	4.88
.50	7.0	- .185	inelastic	3.50

a. Give the formula for computing price elasticity of demand.

b. Compute the price elasticity of demand and enter in the table. Show all work.

c. Show when demand is elastic, unitary, and inelastic.

d. Compute total revenue (PxQ) and enter in the table. Show work.

e. What happens to total revenue when price elasticity of demand is elastic, is unitary, is inelastic as price is lowered?

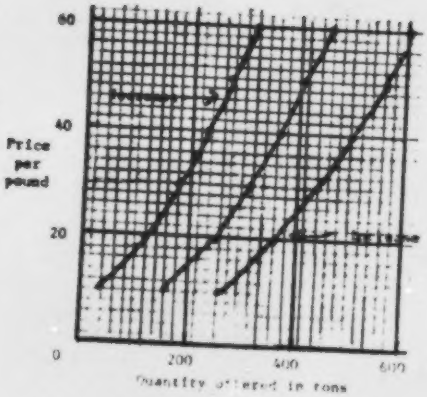
MARKETING

UNIT I

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET #1

a.



b. See above graph.

ASSIGNMENT SHEET #2

a.

$$ES = \cfrac{\cfrac{Q_1 - Q_2}{Q_1 + Q_2}}{\cfrac{P_1 - P_2}{P_1 + P_2}}$$

b.

$$\cfrac{\cfrac{525 - 425}{525 + 425}}{\cfrac{10 - 9}{10 + 9}} = \cfrac{\cfrac{100}{950}}{\cfrac{1}{19}} = \cfrac{\cfrac{1}{9.5}}{\cfrac{1}{19}} = 2.00$$

$$\cfrac{\cfrac{425 - 350}{425 + 350}}{\cfrac{9 - 8}{9 + 8}} = \cfrac{\cfrac{75}{775}}{\cfrac{1}{17}} = \cfrac{\cfrac{1}{10.3}}{\cfrac{1}{17}} = 1.65$$

$$\cfrac{\cfrac{350 - 306.25}{350 + 306.25}}{\cfrac{8 - 7}{8 + 7}} = \cfrac{\cfrac{43.75}{656.25}}{\cfrac{1}{15}} = \cfrac{\cfrac{1}{10.3}}{\cfrac{1}{15}} = 1.00$$

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET #2

b. (Cont.)

$$\frac{\frac{306.25 - 286.25}{306.25 + 286.25}}{\frac{7 - 6}{7 + 6}} = \frac{\frac{20}{592.50}}{\frac{1}{13}} = \frac{\frac{1}{29.6}}{\frac{1}{13}} = .44$$

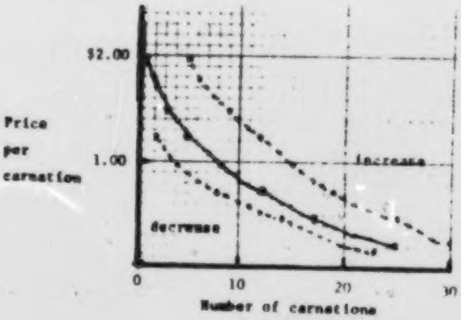
$$\frac{\frac{286.25 - 275}{286.25 + 275}}{\frac{6 - 5}{6 + 5}} + \frac{\frac{11.25}{561.25}}{\frac{1}{11}} = \frac{\frac{1}{49.9}}{\frac{1}{11}} = .22$$

c. Elastic ES = 2.00
Elastic ES = 1.65
Unitary ES = 1.00
Inelastic ES = .44
Inelastic ES = .22

ASSIGNMENT SHEET #3

a. Demand is the schedule of the quantities of a good or service the consumer is willing and able to buy at a given time and place at different prices.

b.



c. See above diagram.

d. Consumers will buy a larger quantity as the price is reduced. The data given illustrates that inverse relationship; at $2 one carnation was bought; at 25¢, 25 were bought.

ASSIGNMENT SHEET #4

a.

$$E_1 = \frac{\frac{Q_1 - Q_2}{Q_1 + Q_2}}{\frac{I_1 - I_2}{I_1 + I_2}}$$

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET #4

b.

$$\frac{\frac{20-30}{20+30}}{\frac{6000-9000}{6000+9000}} = \frac{\frac{-10}{50}}{\frac{-3000}{15{,}000}} = \frac{-.20}{-.20} = 1.000$$

$$\frac{\frac{30-60}{30+60}}{\frac{9000-13{,}500}{9000+13{,}500}} = \frac{\frac{-30}{90}}{\frac{4500}{22{,}500}} = \frac{-.333}{-.20} = 1.665$$

$$\frac{\frac{60-160}{60+160}}{\frac{13{,}500-20{,}250}{13{,}500+20{,}250}} = \frac{\frac{-100}{270}}{\frac{-6{,}750}{33{,}750}} = \frac{-.455}{-.20} = 2.273$$

$$\frac{\frac{160-300}{160+300}}{\frac{20{,}250-30{,}375}{20{,}250+30{,}375}} = \frac{\frac{-140}{460}}{\frac{-10{,}125}{50{,}625}} = \frac{-.304}{-.20} = 1.52$$

ASSIGNMENT SHEET # 5

a.

$$Ed_1 = \frac{\frac{Q_1 - Q_2}{Q_1 + Q_2}}{\frac{P_1 - P_2}{P_1 + P_2}}$$

b. Price elasticity of demand is computed as follows:

$$\frac{\frac{.5-1}{.5+1}}{\frac{2.00-1.75}{2.00+1.75}} = \frac{\frac{-.5}{1.50}}{\frac{.25}{3.75}} = \frac{-.333}{.066} = -5.05$$

$$\frac{\frac{1-2}{1+2}}{\frac{1.75-1.50}{1.75+1.50}} = \frac{\frac{-1}{3}}{\frac{.25}{3.75}} = \frac{-.333}{.077} = -4.32$$

$$\frac{\frac{2-4}{2+4}}{\frac{1.50-1.25}{1.50+1.25}} = \frac{\frac{-2}{6}}{\frac{.25}{2.25}} = \frac{-.333}{.091} = -3.66$$

$$\frac{\frac{4-5}{4+5}}{\frac{1.25-1.00}{1.25+1.00}} = \frac{\frac{-1}{9}}{\frac{.25}{2.25}} = \frac{-.111}{+.111} = -1.00$$

ANSWERS TO ASSIGNMENT SHEETS

ASSIGNMENT SHEET # 5

b. (Cont.)

$$\frac{\frac{5 - 6.5}{5 + 6.5}}{\frac{1.00 - .75}{1.000 + .75}} = \frac{\frac{-1.5}{11.5}}{\frac{.25}{1.75}} = \frac{-.130}{.143} = -.90$$

$$\frac{\frac{6.5 - 7}{6.5 + 7}}{\frac{.75 - .50}{.75 + .50}} = \frac{\frac{-.5}{13.5}}{\frac{.25}{1.25}} = \frac{.037}{.20} = -1.85$$

c. Price elasticity of demand is
elastic when E_d = -5.04, -4.32, -3.66

unitary when E_d = -1.00

inelastic when E_d = -.909, -.185

d. 2.00 x .5 = \$1.00
1.75 x 1 = \$1.75
1.50 x 2 = \$3.00
1.25 x 4 = \$5.00
1.00 x 5 = \$5.00
.75 x 6.5 = \$4.88
.50 x 7 = \$3.50

e. Total revenue increases when E_d is elastic.

Total revenue remains unchanged when E_d is unitary.

Total revenue decreases when E_d is inelastic.

MARKETING

UNIT I

TEST

I. Match the terms on the left to the proper definitions.

____a. Labor

____b. Land

____c. Capital

____d. Management

____e. Resources

____f. Supply

____g. Law of supply

____h. Elasticity of demand

____i. Technology

____j. Fixed resources

____k. Factors of Production

____l. Variable resources

____m. Production

____n. Demand

____o. Income elasticity of demand

____p. Law of demand

____q. Price elasticity of demand

____r. Price

____s. Market

____t. Marketing

____u. Market Structure

1. Those items used in production such as labor machinery, land, and livestock

2. The organization and operation of affairs to achieve a predetermined objective

3. $\frac{TFC}{Y}$

4. The potential income foregone from a resource as a result of using it for another line of production

5. Knowledge applied to improve the production process

6. A market structure in which only one firm produces and sells a product for which there is no substitute

7. Costs that can be changed during the production period

8. The degree of competition in the market

9. A place where buyers and sellers come together to exchange goods and services

10. A measure of a percentage change in the quantity supplied resulting from a percentage change in price

11. The human effort, physical and mental, expended in the production process

12. State that the quantity of goods and services offered by producers on a market varies directly with price

13. Costs that do not require cash settlement. For example wages for one's own labor

14. Consumer will buy a larger quantity as price is reduced

TEST

____v. Cash costs

____w. Non cash costs

____x. Opportunity costs

____y. Variable costs

____z. Fixed costs

____aa. Total variable costs

____bb. Total fixed costs

____cc. Total costs

____dd. Average total costs

____ee. Average variable costs

____ff. Average fixed costs

____gg. Marginal cost

____hh. Economics of sale

____ii. Monopolistic competition

____jj. Monopoly

____kk. Oligopoly

____ll. Perfect competition

15. Resources that vary as production changes

16. Land, labor, capital, management

17. A market structure characterized by a large number of buyers and sellers with no one seller or buyer being able to influence price

18. The change in total costs associated with producing one more unit of output

19. The sum of all variable costs

20. The per unit market value of a good or service

21. A schedule of the quantities of a good or service the consumer is willing and able to buy at a given time and place at different prices

22. Good and services saved from consumption, used by or as a part of the human agent in further production, including investment in improving the human resource

23. The schedule of the quantities of a good or service producers are willing and able to sell at a given time at different price levels in a given market

24. Resources that do not vary as production changes

25. The measure of a change in consumption of a good resulting from a change in income

26. $\frac{TC}{Y}$

27. The sum of all fixed costs

28. The exchange of ownership and price determination in a market

29. The transformation of two or more resources (factors of production) into one or more products

30. The measure of a percentage change in quantity demanded relative to a percentage change in price

TEST

31. The natural resource untouched by human effort. It is the total of the earth and water, the plants and animals, and the minerals that existed in nature

32. Costs arising from using resources that are used even if no production is undertaken and whose quantity cannot be changed during the production period.

33. A market structure with many producers each able to influence price, but with little effect on the actions of the competition

34. The sum of all fixed costs plus the sum of all variable costs TC = TFC + TVC

35. A market structure with few producers who can influence price and the actions of their competitors

36. $\frac{TVC}{Y}$

37. Reduction in per unit output costs as output is increased

38. Costs that require an out of pocket expenditure; the exchange of money, including checks, for resources

2. Name the four factors that affect agriculture production.
   a.

   b.

   c.

   d.

3. List the three basic types of problems confronting agriculture production.
   a.

   b.

   c.

4. State the law of supply.

TEST

5. Discuss in writing characteristics of a supply schedule.

6. Name five factors that cause a change in supply.

   a.

   b.

   c.

   d.

   e.

7. Given the following information determine the elasticity of supply.

Price per Unit	Quantity Offered	Elasticity of Supply	Types of Elasticity
$10.00	525		
9.00	425		
8.00	350		
7.00	306.25		
6.00	286.25		
5.00	275.00		

8. Name the six ways production costs are classified.

   a.

   b.

   c.

   d.

   e.

   f.

TEST

9. Given the following information, compute the costs of production.

Units of Input	Units of Output	Total Fixed Costs TFC	Total Variable Costs TVC	Total Cost TC	Average Fixed Costs AFC	Average Variable Cost AVC	Average Total Cost ATC	Marginal Cost MC
0	0	$50.00	$ .00					
1	6	50.00	5.00					
2	15	50.00	10.00					
3	26	50.00	15.00					

Fixed costs = $50.00
Price of inputs = $5.00
Price of output = 2.00

TEST

10. Construct a demand schedule from the following information.

Price	Number Bought
2.00	1
1.75	2
1.50	3
1.25	5
1.00	8
.75	12
.50	17
.25	25

11. State the law of demand.

12. Name nine factors that may cause a change in demand.

a.

b.

c.

d.

e.

f.

g.

h.

i.

13. Describe a market demand.

14. State the rule of income elasticity of demand.

TEST

15. Name three general observations about the effect of income on the demand for food.

    a.

    b.

    c.

16. Given the following information compute the price elasticity of demand.

Price per pound of Bacon ($)	Bacon Bought Weekly (pounds)	Price elasticity of demand	Type of elasticity	Total Revenue
2.00	0.5			
1.75	1.00			
1.50	2.00			
1.25	4.00			
1.00	5.00			
.75	6.5			

17. Discuss in writing the nature of demand for agricultural products.

18. Name three functions prices perform in our economy.

    a.

    b.

    c.

19. Name three factors that determine the price of a product.

    a.

    b.

    c.

20. Discuss in writing the effects of changes in demand and supply on price.

TEST

21. Name the four types of market structure present in agriculture marketing.

    a.

    b.

    c.

    d.

22. Distinguish the characteristics of the four different market structures present in agricultural marketing by placing a (P) for those items refering to perfect competition, an (M) for those items refering to monopoly-monopsony, an (O) for oligopoly-oligopsony, and a (C) for monopolistic competition in the blank to the left.

    ______ Many small firms each producing a small portion of the total industry

    ______ A small number of larger firms each producing (or buying) a large enough portion of the total to affect prices

    ______ Large number of individual sellers that no one seller can influence price

    ______ All sellers offer nearly identical products

    ______ There is only one firm and they determine the amount produced

    ______ There is limited entry into the industry by new firms

    ______ There are no close substitutes for the products

    ______ Little restriction for new firms entering the industry

MARKETING

UNIT I

ANSWERS TO TEST

1. a. 11
   b. 31
   c. 22
   d. 2
   e. 1
   f. 23
   g. 12
   h. 10
   i. 5
   j. 24
   k. 16
   l. 15
   m. 29
   n. 21
   o. 25
   p. 14
   q. 30
   r. 20
   s. 9
   t. 28
   u. 8
   v. 38
   w. 13
   x. 4
   y. 7
   z. 32
   aa. 19
   bb. 27
   cc. 34
   dd. 26
   ee. 36
   ff. 3
   gg. 18
   hh. 37
   ii. 33
   jj. 6
   kk. 35
   ll. 17

2. a. Land
   b. Labor
   c. Capital
   d. Management

3. a. How Much to Produce
   b. How to Use Resources for Production
   c. What to Produce

ANSWERS TO TEST

4. The quantities of good and services offered by producers on a market varies directly with price

5. a. Represents responsiveness if producer to various product prices
   b. Quantity moves in the same direction as price
   c. Supply curve is upward sloping
   d. Price determined where we know how consumers and producers respond to price

6. a. A change in the price of inputs
   b. A change in the price of other products
   c. A change in producer price expectations
   d. A change in the number of producers
   e. A change in technology

7.

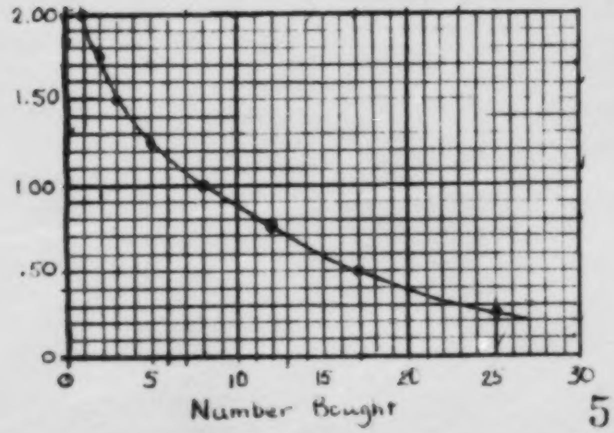
—	--
2.00	elastic
1.65	elastic
1.00	unitary
.44	inelastic
.22	inelastic

8. a. cash
   b. non cash
   c. opportunity
   d. fixed
   e. variable
   f. marginal

9.

TC	AFC	AVC	ATC	MC
$50.00	-	-	-	-
55.00	$8.33	0.83	9.16	0.83
60.00	3.33	0.66	4.00	0.56
65.00	1.92	0.58	2.50	0.45

10.



ANSWERS TO TEST

11. Consumer will buy a larger quantity as price is reduced.

12. a. Change in consumer wants
    b. Disposable income change
    c. Change in family situation
    d. Substitute produce becomes available
    e. Change in weather
    f. Occurance of holidays
    g. Prices of other products
    h. Consumers propensity to save
    i. Producer influence change (advertising)

13. The total of all the individual demand schedules for the product represents the market demand for that good or service.

14. The measure of a change in consumption of a good resulting from a change in income.
    Note: (Income elasticity can be thought of as consumer response to changes in income)

15. a. The poorer a family, the higher will be the portion of its income spent on food.
    b. As income changes, food consumption will change in the same direction.
    c. As income changes, the purchased food items change.

16.

Price elasticity	Type of elasticity	Total Revenue
--	--	1.00
-5.04	elastic	1.75
-4.32	elastic	3.00
-3.66	elastic	5.00
-1.00	unitary	5.00
- .909	inealstic	4.88
- .185	inealstic	3.50

17. Most agricultural products, particularly food, are considered to be necessities. Necessities tend to have:
    1. An income elasticity of demand that is relatively elastic at low income levels and less elastic at higher income levels.
    2. A price elasticity of demand that is relatively inelastic.
    3. A higher price and income elasticity at the retail than at the producer level.
    4. A high degree of variation among products for both price and income elasticity.
       Note: (The U.S Consumer's income elasticity of demand for food is inelastic, about .3, which means that 1 percent increase in income results in .3 persent increase in expenditures on food.)

ANSWERS TO TEST

18. a. Guide and regulate consumption
    b. Guide and regulate production
    c. Guide and regulate distribution of income among owners of production resources.

19. a. The supply of commodity
    b. The demand for the commodity
    c. The general price level

20. A. Prices will rise if:
    1. Demand increases and there is no change in supply
    2. Supply decreases and there is no change in demand
    3. Supply decreases and demand increases

    B. Prices will fall if:
    1. Demand decreases and there is no change in supply
    2. Supply increases and there is no change in demand
    3. Supply increases and demand decreases

    C. Prices may either rise, fall, or remain the same depending on the size of change when demand and supply move in the same direction. If,
    1. Both demand and supply decrease
       a. Price will rise if supply decreases relatively more than demand decreases
       b. Price will fall if supply decreases relatively less than demand increases
       c. Price will remain the same if supply decreases the same as demand increases
    2. Both demand and supply increases
       a. Price will rise if demand increases relatively more than supply increases
       b. Price will fall if demand increases relatively less than supply increases
       c. Price will remain the same if demand increases the same as supply increases

21. a. Perfect competition - competition among many
    b. Monopoly - monopsony - no competition
    c. Oligopoly - oligopsony - competition among a few
    d. Monopolistic competition - competition among many

22. C
    O
    P
    P
    M
    O
    M
    C

MARKETING

UNIT II

FORWARD CONTRACTING

TERMINAL OBJECTIVE

Upon completion of this unit, students will be able to match terms associated with forward contracting. Students will be able to name the classes of forward contracting and be able to list advantages of these classes. Students will also be able to develop a forward contract. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms associated with forward contracting.
2. Name the three classes of forward contracting.
3. Identify the markets to which each of the forward contract classes are applied.
4. List advantages for both contractor and producer of using a market specification contract.
5. List advantages of using production management contracts for both the processor and producer.
6. List advantages of using resource providing contracts for both the integrator and producer.
7. Explain in writing the economic implications of forward contracting.
8. Describe in writing the economic implications of forward contracting.
9. List five benefits of forward deliverable contract markets.
10. Select from a list, characteristics of a forward deliverable contract.
11. List four necessities for a successful Forward Deliverable Contract Market.
12. List four alternatives for trading forward deliverable contracts.

SPECIFIC OBJECTIVES

13. Discuss in writing five advantages of forward deliverable contract marketing.

14. Discuss in writing the three disadvantages of forward deliverable contract marketing.

15. Explain the difference between a cash forward contract and a delayed price contract.

16. Name four benefits of cash marketing.

17. Name two disadvantages of cash marketing.

18. Discuss in writing the four elements to include in a contract.

19. Explain in writing how pooled sales agreement works.

20. Discuss in writing the three marketing functions.

MARKETING

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheets
2. Provide students with Information Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

TM 1 - Classification of Forward Contracts

TM 2 - Summary of Economic Consequences of Forward Contract Transactions Relative to Spot Market Transactions

TM 3 - Extent of Output Produced Under Contracts by Selected Commodity Groups

TM 4 - How a Cash Forward Contract Works and How a Delayed Price Contract Works

INSTRUCTIONAL MATERIALS

TM 5 - Example Cash Forward Contract

TM 6 - Example Delayed Price Contract

TM 7 - Marketing Channels for Feed Grains

TM 8 - Marketing Channels for Livestock

TM 9 - Marketing Alternatives in Solving Producer Marketing Problems

TM 10 - Alternatives Most Applicable to Particular Commodities and Commodity Groups

TM 11 - Producer Initiative and Government Involvement in Marketing Alternatives

4. Test

5. Answers to Test

References:

1. "Vertical Coordination Through Forward Contracting," Marketing Alternatives for Agriculture, Sporleder and Holder, New York State of Agriculture, Cornell University.

2. "The Option in Perspective," Marketing Alternatives for Agriculture, Knuston and Forker, New York State of Agriculture, Cornell University.

3. "Forward Deliverable Contracts", Marketing Alternatives for Agriculture, Holder and Sporleder, New York State of Agriculture, Cornell University.

4. "Profit-Oriented Farm Marketing," Farmer's Grain and Livestock Corporation, Des Moines, Iowa.

5. Agricultural Economics, Goodwin, Reston Publishing Co., Reston, Virginia, 1977.

MARKETING

UNIT II

INFORMATION SHEET

I. Terms and Definitions

A. Forward Contract - a written agreement between a producer and a contractor relating to the delivery and acceptance of a specified product at some future date.

B. Market Specification Contract - usually signed after production begins; specifies the quantity of a product to be delivered, but not the quality. The producer has title to the commodity until delivery and supplies the inputs necessary for production.

C. Production Management Contracts - usually signed before production of the commodity begins and specifies both quantity and quality to be delivered. The producer has title to the commodity until deliver, but often some inputs, such as seed or fertilizer, are supplied by the contractor.

D. Resource Providing Contracts - stipulates that most inputs are supplied by the contractor. The farmer supplies little to the production process except labor and land, and is paid based on the volume of output.

E. Risk - The possibility of suffering loss due to unknown factors or elements.

F. Speculator - one who engages in the buying and selling of a commodity with an element of risk on the chance of great profit.

G. Fixed Price Agreement - Those pricing agreements where the price for the commodity is locked in and cannot be changed.

H. Formula Pricing - price set between producer and contractor concerning the terms of trade in a particular contract with negotiation, depending upon the market power of the individual involved.

I. Delayed Pricing Agreement - an agreement between seller and buyer that states goods will be deliverable and prices will be based on local price minus service charge.

J. Pooled Sales Agreement - a device cooperatives use; may be called one of the automatic pricing devices. The basic price source is the price at which the cooperative sells the product in relation to operating expenses and the average price during the life of the pool.

K. Cash Contracts - a readily available, simple form of marketing, where small sales are possible and price is known immediately.

INFORMATION SHEET

L. Contractual Integration - the combination of various productions, processing and marketing functions.

M. Deliverable Contract - a means of achieving the benefits of open-market trading, along with the benefits of contracting.

N. Contract - an oral or written agreement between two or more people.

O. Commodity - an article of trade or commerce that can be transported.

P. Spot Market - A local market that operates on a cash market basis.

Q. Market Access - the market state of being easy to enter.

R. Clearinghouse - the separate agency associated with a futures exchange through which futures contracts are offset or fulfilled and through which financial settlement is made, (also, Clearing Association).

II. Classes of Forward Contracting

- A. Market specification contracts
- B. Production management contracts
- C. Resource providing contracts

III. Markets of the Forward Contract Classes

- A. Market specification contracts
  - 1. Grain
  - 2. Cotton
  - 3. Livestock
  - 4. Other storable commodities
- B. Production management contracts
  - 1. Vegetable for processing (tomatoes, peas, corn)
  - 2. Other perishable commodities

INFORMATION SHEET

C. Resource providing contracts

1. Broilers

2. Eggs

IV. Advantages of a Market Specification Contract

A. Contractor's advantages

1. Fixing a price prior to harvest

2. Assurance of a particular quantity and quality to meet commitment to the customers of the contractor.

3. Amount of output which is contracted in any one production season tends to be volatile and dependant upon anticipated supplies for that particular season.

4. Control through contract term of quality or timing of deliveries.

5. Speculation by fixing price through the contract

B. Producer's advantages

1. Assurance of a market at time of harvest

2. Establishing a known price in advance of harvest time

3. Price risk is shifted to the contractor.

4. Fixed price contracts have a favorable impact on the ability of the producer to obtain a production loan. (assures some cash flow)

5. Reduces speculation

V. Advantages of Production Management Contracts

A. Processor

1. Secures particular quality and quantity of product

2. Secures timing of deliveries

3. Processing costs are minimized

4. Achieves high degree of quality control

5. Minimized time lag by scheduling production to match capacity of processing facilities

INFORMATION SHEET

6. Increases coordination and reduces costs of operation

B. Producer

1. Assures a market

2. May assure a price

3. Price risk shifted to contractor

4. Production loan easier to obtain

5. Farmer incentive for entering such arrangements is primarily market access

VI. Advantages of Resource Providing Contracts

A. Integrator

1. Reduce costs of production through the coordination and singular managerial control of more than one marketing level. Note: (This can include the ability to specify cultural practices, quality and quantity produced, timing of production and delivery, as well as input cost control).

B. Producer (farmer)

1. Market access
Note: (Often without such a prior arrangement, output cannot be sold).

2. Production process is basically free from risk

VII. Pricing Mechanism for Forward Contracts

A. Market specification and production management forward contracts have either a fixed price or formula price which is most commonly set by individual negotiation between producer and contractor.

B. Individual buyers and sellers discuss price and other terms of trade in a particular contract until some mutual agreement is reached.

C. Outcome of negotiations largely depends on the relative market power of the individuals involved.

D. A group of producers may form a bargaining association which negotiates a base contract price and terms for all members of the association.

INFORMATION SHEET

E. Even with group bargaining, individual producers are usually free to negotiate with processors or buyers in an effort to secure better price or terms of trade than the bargaining association accepted.

F. Formula pricing allows the commodity price to be fixed after the contract is signed.

G. The formula may reflect many factors and can be based on spot market price for the processes commodity or on prices in the future market.

H. Formula contract prices in market specification and production management contracts are sometimes based on a particular month of the futures market contract for the same commodity.

I. Under resource providing contracts, output at the farm gate level is not priced.

J. These contracts usually reimburse the farmer for inputs in the production process (e.g., labor, land, buildings).

K. Resource providing contracts could simply provide a fixed return based on volume of output, such as dollars per pound of gain.

VIII. Economic Implications of Forward Contracting

A. Competition and market access

B. Allocation of risk

C. External effects
Note: (Contracting allows processors close coordination of deliveries with plant needs)

D. Effects on consumers
Note: (Consumers may or may not benefit as a result of a shift from spot market transactions to contracting. Contracting can be used to reflect consumers' quality desires to producers prior to production).

IX. Benefits of Forward Deliverable Contract Markets

A. Could result in more accurate and timely prices

B. More efficient allocation of resources

C. Greater access to market

INFORMATION SHEET

D. Greater market power for producers

E. Reduced transactions costs for processors

X. Characteristics of Forward Deliverable Contract Markets

A. A high percentage of deliveries reduces the usefulness of a futures market since it is designed to facilitate forward pricing through hedging and speculation.

B. The whole purpose is to create a market for contracts that would always result in delivery.

C. Grants processors the right to specify time and place of delivery.

D. When contract is made, buyer and seller are made known to each other.

E. Does not become a party to each and every contract as does a clearinghouse in the futures market.

F. Delivery is direct from seller to buyer.

G. Only in unusual circumstances, such as crop failure, would the seller or buyer be permitted to liquidate a contract position by payment of damages to the opposite party.

H. Producers and processors can enter FDCM directly, without the services of broker.

I. In FDCM, the financial strength and integrity of individual producers and processors would have to be certified prior to their participation in the market.

J. Financial certification, as well as various penalties for noncompliance, would be required to enforce the contract.

XI. Necessities for a Successful Forward Deliverable Contract Market

A. A sufficiently large number of buyers and sellers to form a competitive market

B. An accurately describable commodity

C. Genuine buyer and seller interest

D. A large volume of transactions

INFORMATION SHEET

XII. Alternatives for Trading Forward Deliverable Contracts

A. Computerized exchange for matching producer price offers and processor price bids

B. Telephone exchange that would make the match manually

C. Telephone or teletype auction

D. "Trading Pit", as is used in most futures markets

XIII. Advantages of Forward Deliverable Contract Markets

A. Operational efficiency

1. Efficient, high volume exchange system that could centralize transactions over a broad geographic area.

2. Actual operating costs of FDCM could be less than the costs of spot transactions.

3. Could permit automatic adjustment of bids and offers to account for transportation costs between all sellers and buyers.

B. Pricing efficiency

1. Comparison of prices over quality, quantity, location and time could be facilitated by computerized market reports and by price quotations.

2. Could more systematically allocate each quality of available supplies among processors.

C. Market power, market access and competition

1. Provide a more competitive market.

2. More accessibility to market information as producers have more information.

3. Producers have access to a number of buyers instead of only one or two local buyers.

INFORMATION SHEET

D. External effects

   1. Could encourage a shift from spot markets to contracting by making contracting more convenient and more equitable for processors and producers.

   2. Development of futures market for processed products.

E. Effect on consumers

   1. Could benefit from lower costs due to increased pricing efficiency.

   2. If wholesale and retail markets were competitive, consumers could benefit.

XIV. Disadvantages of Forward Deliverable Contract Markets

A. The producer must search for an individual buyer willing to enter into a forward deliverable contract.

   1. Difficult

   2. Time-consuming

   3. Not unusual for a producer to find no one willing to forward contract his product

B. The prices negotiated in these contracts are typically not public knowledge

   1. The producers' profit then becomes a function of not only his productive efficiency, but of his individual bargaining skill as well.

   2. Often forced to deal with a large-volume buyer who has much better access to market information and current price levels than he does.

C. There is typically no formal mechanism for settling disputes

   1. A producer may find that if the market price has fallen substantially below the contract price, his product is no longer "in grade" as far as the buyer is concerned.

   2. Each party has access to the courts should the other party default.

      a. Expensive

      b. Time-consuming

INFORMATION SHEET

XV. Difference Between a Cash Forward Contract and a Delayed Price Contract

A. How a Cash Forward Contract Works

In March, the following marketing opportunity is available to you for corn:

CBT December futures	$2.70
Less: basis	.25
Cash Price at harvest	2.45
Less: Estimated Cost of Production	2.25
Net Profit per Bushel	$ .20

The basis is reasonable and you can net a small profit. A cash forward contract can be used to lock in that profit, eliminating risk on that portion of the crop contracted.

B. How a Delayed Price Contract Works

You are harvesting corn and you are running out of storage space. This is the situation you find at your local elevator.

Cash Corn Price	$2.00/bu.
Storage - 3 cents per month	
Interest (10%) 2 cents per month	
Storage and Interest for 5 months	.25/bu.

Therefore, you would need $2.25 per bushel in March to equal $2.00 at harvest.
You sign a DELAYED PRICE CONTRACT that allows you to set the price posted at the elevator any given day before March 31. Assume that on March 20, cash corn is:

CASH CORN	$2.31
Less: Interest at 2 cents/mo.	.10
Real Net Price	$2.21/bu.

XVI. Benefits of Cash Marketing

A. Readily available and simple

B. Small sales possible

C. Price known immediately

D. No cash expense

E. Funds are available immediately

F. Eliminates speculation

INFORMATION SHEET

XVII. Disadvantages of Cash Marketing

A. Cash price usually lower than futures

B. Loss of flexibility

XVIII. Elements of Contracts

A. Who -- identifies buyer and seller

B. What -- identifies the commodity, quality, quantity

C. Where -- specify delivery point and method of delivery when possible

D. When -- specify time and method of payment as well as penalties for later or early delivery

XIX. Pooled Sales Agreements

A. The producer is paid an advance covering part of the value of his product.

B. When the season is over, a part of the next proceeds is distributed as final payment of the goods.

C. In basing point price systems, one or more locations may be chosen as basing points.

NOTE: A base price is announced for each basing point, and prices at other points are calculated by adding transportation costs.

XX. Marketing Functions

A. The exchange function - transfer of title and merchandising

B. The physical function

1. Transportation

2. Storage

C. The facilitating function

1. Standardization of product

2. Financing

3. Market information

4. Risk-bearing
    a. Physical risk
    b. Price risk

CLASSIFICATION OF FORWARD CONTRACTS

CONTRACT TERMS	MARKET SPECIFICATION CONTRACTS	PRODUCTION MANAGEMENT CONTRACTS	RESOURCE PROVIDING CONTRACTS
SPECIFIES DELIVERY SCHEDULE	YES	YES	YES
SIGNED AFTER PRODUCTION BEGINS	YES (USUALLY)	NO	NO
TITLE OF COMMODITY WITH PRODUCER	YES	YES	NO
PRICE TO PRODUCER	FIXED OR BY FORMULA	FIXED OR BY FORMULA	BASED ON VOLUME OF OUTPUT
SPECIFIES QUANTITY	SOMETIMES	SOMETIMES	YES
SPECIFIES QUALITY	NO (USUALLY)	YES	YES
SPECIFIES CULTURAL PRACTICES	NO	SOME	YES
MONEY ADVANCED TO PRODUCER BY CONTRACTOR	FEW	FEW	SOMETIMES
INPUT SUPPLIED BY CONTRACTOR	NO	SOME	MOST
INPUTS FINANCED BY PRODUCER	YES	MOST	FEW
EXAMPLES	GRAIN, COTTON, LIVESTOCK	VEGETABLES FOR PROCESSING	BROLLERS, EGGS

Summary of Economic Consequences of Forward Contract Transactions Relative to Spot Market Transactions

ITEM	PRODUCER	FIRST HANDLER	CONSUMERS
PRODUCTION COSTS	A	A	A
EXCHANGE COSTS	A	N	A
COMPETITION	D	A	N
MARKET ACCESS	D	A	N
PRICE RISK	A	D	N

KEY TO TABLE - A - ADVANTAGE, D - DISADVANTAGE, N - NEUTRAL OR NOT APPLICABLE

Extent of Output Produced Under Contracts by Selected Commodity Groups

COMMODITY	EXTENT OF CONTRACTING[A]
CROPS:	
FEED AND FOOD GRAINS	LOW
VEGETABLES FOR FRESH MARKET	MEDIUM
VEGETABLES FOR PROCESSING	HIGH
POTATOES	MEDIUM
CITRUS FRUITS	HIGH
SUGARBEETS	HIGH
SUGARCANE	MEDIUM
COTTON	MEDIUM
OIL BEARING CROPS	LOW
ALL CROPS[B]	LOW (ABOUT 9%)
LIVESTOCK OR LIVESTOCK PRODUCTS:	
FEED CATTLE	MEDIUM
SHEEP, HOGS	LOW
FLUID-GRADE MILK	HIGH
MANUFACTURING-GRADE MILK	MEDIUM
EGGS	MEDIUM
BROILERS	HIGH
TURKEYS	MEDIUM
ALL LIVESTOCK ITEMS	MEDIUM (ABOUT 31%)
TOTAL CROP AND LIVESTOCK	MEDIUM (ABOUT 17%)

[A] "LOW" IS BETWEEN ZERO AND 10 PERCENT OF OUTPUT CONTRACTED.
"MEDIUM" IS MORE THAN 10 BUT LESS THAN 50 PERCENT OF OUTPUT CONTRACTED.
"HIGH" IS 50 PERCENT OR MORE OF OUTPUT CONTRACTED.

How a Cash Forward Contract Works and How a Delayed Price Contract Works

IN MARCH THE FOLLOWING MARKETING OPPORTUNITY IS AVAILABLE TO YOU FOR CORN:

CBT DECEMBER FUTURES	$2.70
LESS: BASIS	.25
CASH PRICE AT HARVEST	$2.45
LESS: ESTIMATED COST OF PRODUCTION	2.25
NET PROFIT PER BUSHEL	$ .20

THE BASIS IS REASONABLE AND YOU CAN NET A SMALL PROFIT. A CASH FORWARD CONTRACT CAN BE USED TO LOCK IN THAT PROFIT, ELIMINATING RISK ON THAT PORTION OF THE CROP CONTRACTED.

YOU ARE HARVESTING CORN AND YOU ARE RUNNING OUT OF STORAGE SPACE. THIS IS THE SITUATION YOU FIND AT YOUR LOCAL ELEVATOR:

CASH CORN PRICE	$2.00/BU.
STORAGE - 3 CENTS PER MONTH	
INTEREST (10%) 2 CENTS PER MONTH	
STORAGE AND INTEREST FOR 5 MONTHS	.25/BU.

THEREFORE, YOU WOULD NEED $2.25 PER BUSHEL IN MARCH TO EQUAL $2.00 AT HARVEST.

YOU SIGN A DELAYED PRICE CONTRACT THAT ALLOWS YOU TO SET THE PRICE POSTED AT THE ELEVATOR ANY GIVEN DAY BEFORE MARCH 31.

ASSUME THAT ON MARCH 20, CASH CORN IS:

CASH CORN	$2.31
LESS: INTEREST AT 2 CENTS/MO.	.10
REAL NET PRICE	$2.21/BU.

Example Cash Forward Contract

Warehouse License No.____________________ Contract No.____________________

GRAIN PURCHASE CONTRACT

With Seller's Option to Establish Price Later

1.______________________________ ________________________, IOWA,
(Purchasing Firm Name) (Address)

a corporation hereinafter known as Buyer, and

______________________________ ________________________,hereinafter
(Seller's Name) (Address)

known as Seller, covenant and agree as follows:

2. The Buyer agrees to purchase from Seller, and the Seller hereby agrees to sell,____________ bushels of #_____ ____________ with the Seller's option to establish the price later in accordance with terms and conditions hereinafter set forth below.

3. The title and all other rights of ownership of the grain described in this contract are transferred hereby from Seller to Buyer. The price for said grain, however, shall be fixed by the Seller between now and the _________day of____________, 19___. The Seller may price whenever the Buyer is open for business unless paragraph four (4) is used to establish the price, in which case the Seller may fix the price only during the hours the Chicago Board of Trade is open and trading. But if the Seller does not fix the price of the grain on or before the above date, the Buyer shall fix it on the following business day in accordance with the higher of the two prices described in paragraphs four (4) and five (5) herein.

4. The price shall be_____¢ per bushel under the _________,19_____ Chicago Board of Trade futures contract at the time of pricing if the Seller fixes the price on or before __________________ _______, 19________. If the Seller elects to wait until a later date to price the grain, the price shall be _________¢ per bushel under the _______________, 19______ Chicago Board of Trade futures contract at the time of pricing.

5. The Seller has the further option of accepting the Buyer's regular posted bid at ________________________, Iowa instead of fixing the price as set forth in paragraph four (4) above. If the Seller elects this latter method of establishing the selling price of the grain described herein, the Seller further agrees to allow the Buyer to subtract from the selling price ____________¢ per bushel per day as a charge for this service. This charge shall cover the actual number of days between the date of delivery and the date the Seller fixes the price. It is agreed between Buyer and Seller that said service charge shall total no (more) (less) than ____________¢ per bushel.

6. The Buyer agrees to pay the total amount due the Seller, without interest, on the final sales pricing date, but not before _____________ ______, 19____, the latter of these two dates shall be binding upon both parties.

7. Seller hereby warrants that title to the above grain is free from encumbrance of any nature whatsoever and the Seller has good and merchantable title, with the right to dispose of same.

8. It is further agreed by and between the Buyer and Seller that this contract shall be binding upon the heirs, administrators, executors of the respective parties and that this contract cannot be assigned without written consent of the other party.

9. In accordance with provisions of Chapter 543, Code of Iowa, the Seller is hereby notified that the warehouse insurance and bond required by this Chapter does not cover the bulk grain within this contract and any monetary recovery by the Seller in case of insurance loss or company insolvency will be only as a general creditor against such remaining assets of the buyer herein named after such prior claimant precedence as set forth in the aforementioned Chapter.

10. ENTERED INTO THIS ____________ DAY OF ______________, 19____.

______________________________ SELLER

__________________________________ BUYER (ELEVATOR)

By: __________________________________

(ALL COPIES MUST BE SIGNED BY BOTH PARTIES)

Example Delayed Price Contract

DELAYED GRAIN PRICING CONTRACT

Purchase Contract No.______________

Date____________________________

FROM: ____________________________

ADDRESS: ________________________

Purchaser agrees to buy and seller agrees to sell and deliver to purchaser at (name and location of firm), not later than ______________ day of ______________, 19____.

QUANTITY: ______________________

GRADE & GRAIN: __________________

DISCOUNT SCALE: Market scale of discounts at time of pricing.

The Seller accepts the regular posted bid at (location) to establish the price of the grain,

1. The final price shall be established during the trading session prior to 1:00 P.M. on whatever date the Seller elects.
2. Seller agrees to price contract on or before July 1, 1976 and failure to do so will result in pricing the contract automatically on July 1, 1976.
3. The Seller further agrees to allow the buyer to subtract from the selling price 1/20¢ per bushel per day service charges, with a minimum of __________ per bushel.
4. Seller hereby warrants that title to the above grain is free from encumbrance of any nature whatsoever and that Seller has good and merchantable title, with the right to dispose of same. Seller hereby authorizes the Buyer to contract for the sale or disposition of said grain for Buyer's own account either before or after delivery to the elevator above designated without further authorization from Seller except this contract, and buyer shall not be required to pay for the grain covered by this contract until it is priced by the seller per (1) above.

IN ACCORDANCE WITH PROVISIONS OF CHAPTER 543, CODE OF IOWA, THE SELLER IS HEREBY NOTIFIED THAT THE WAREHOUSE INSURANCE AND BOND REQUIRED BY THIS CHAPTER DOES NOT COVER THE BULK GRAIN WITHIN THIS CONTRACT AND ANY MONETARY RECOVERY BY THE SELLER IN CASE OF INSURANCE LOSS OR COMPANY INSOLVENCY WILL BE ONLY AS A GENERAL CREDITOR AGAINST SUCH REMAINING ASSETS OF THE BUYER HEREIN NAMED AFTER SUCH PRIOR CLAIMANT PRECEDENCE AS SET FORTH IN THE AFOREMENTIONED CHAPTER.

FOR USE IN FINAL PRICING

Local Elevator Board Price_______________ SELLER:____________________________

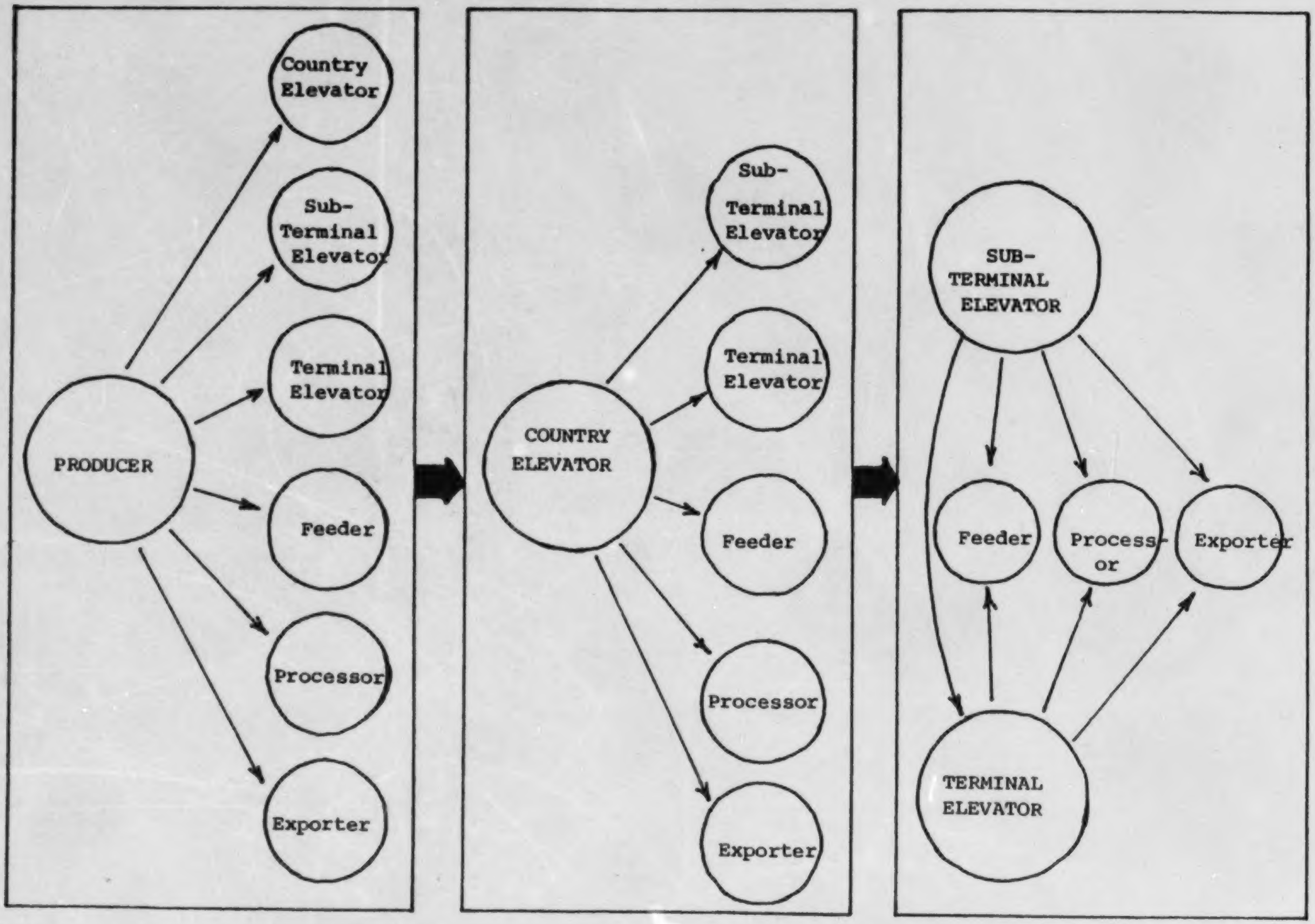
LESS: Service charge____________________

Final price_______________________ PURCHASER:_________________________

____

BY_________________________________

MARKETING CHANNELS FOR FEED GRAINS



PRODUCER
Country Elevator
Sub-Terminal Elevator
Terminal Elevator
Feeder
Processor
Exporter

COUNTRY ELEVATOR
Sub-Terminal Elevator
Terminal Elevator
Feeder
Processor
Exporter

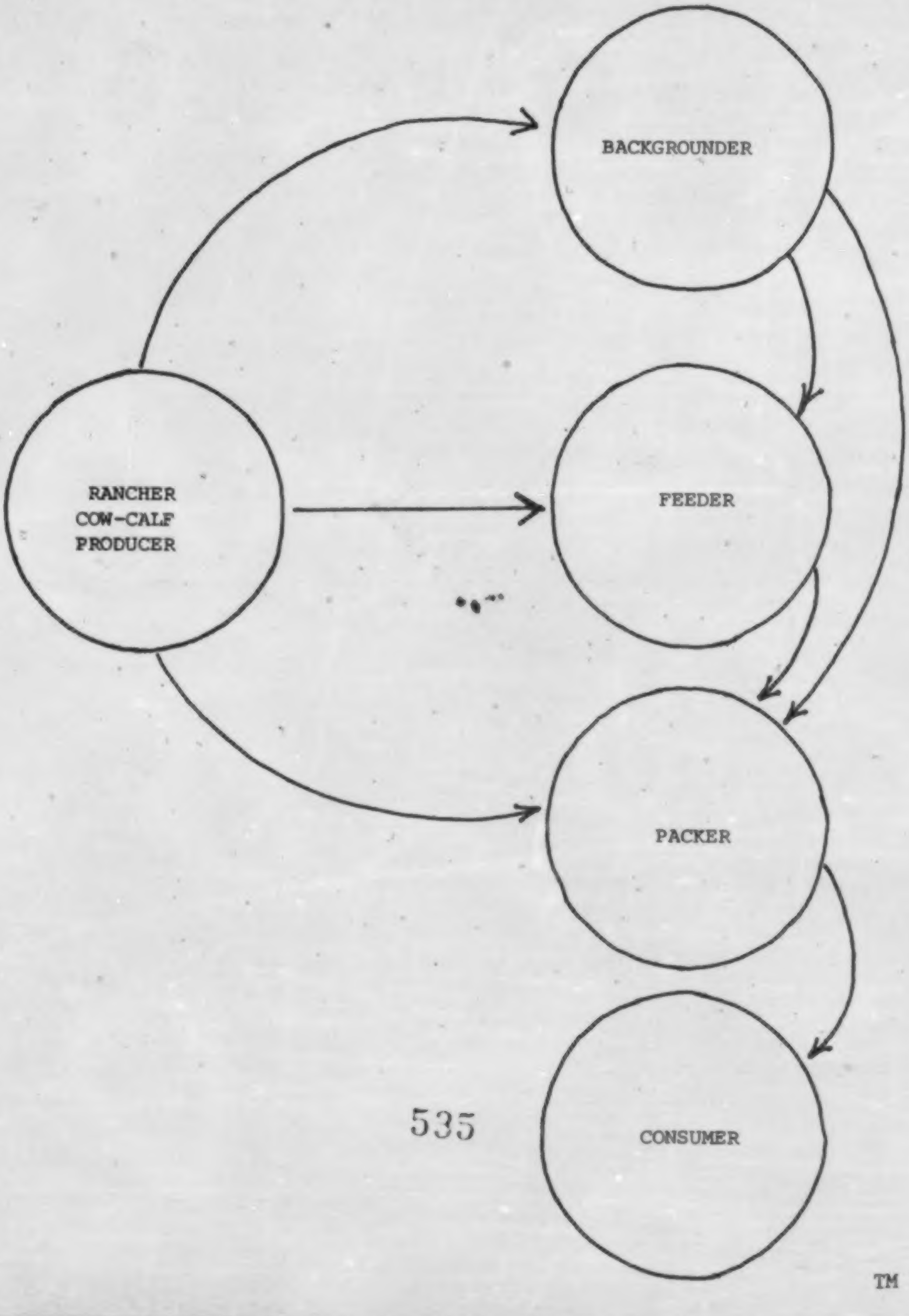
SUB-TERMINAL ELEVATOR
TERMINAL ELEVATOR
Feeder
Process-or
Exporter

PRODUCER

COUNTRY ELEVATOR

SUB-TERMINAL & TERMINAL ELEVATOR

MARKETING CHANNELS FOR LIVESTOCK



Marketing Alternatives in Solving Producer Marketing Problems

MARKET ALTERNATIVE	IMPACT ON MARKETING PROBLEM				
	ENHANCE COMPETITION	IMPROVE INFORMATION	BALANCE POWER	IMPROVE MARKET ACCESS	IMPROVE COORDINATION
ELECTRONIC EXCHANGE	X	X		X	
CONTRACTING					X
FORWARD DELIVERABLE CONTRACT MARKETS	X	X		X	X
MANDATORY REPORTING	X	X			
EXCLUSIVE AGENCY BARGAINING			X		
OWNERSHIP INTEGRATION			X	X	X
JOINT VENTURE				X	X
MARKETING ORDERS		X	X		
MARKETING BOARDS			X		
INDUSTRIAL RESTRUCTURING	X		X		
FINE TUNING	X	X	X		

Alternatives Most Applicable to Particular Commodities and Commodity Groups

	LIVESTOCK	MILK	POULTRY	FRUITS AND VEGETABLES	OILSEEDS AND GRAINS	COTTON	TOBACCO
ELECTRONIC EXCHANGE	X		X			X	
CONTRACTING	X	X	X	X		X	X
FORWARD DELIVERABLE CONTRACT MARKETS	X		X	X		X	X
MANDATORY REPORTING	X		X	X	X	X	
EXCLUSIVE AGENCY BARGAINING	X	X	X	X			X
OWNERSHIP INTERGRATION	X	X	X	X	X	X	X
JOINT VENTURE		X	X	X	X	X	
MARKETING ORDERS		X		X		X	
MARKETING BOARDS					X		X

Producer Initiative and Government Involvement in Marketing Alternatives

MARKET ALTERNATIVE	TYPE AND LEVEL OF PRODUCER INITIATIVE			LEVEL OF GOVERNMENT INVOLVEMENT
	FINANCIAL	MARKET	POLITICAL	
ELECTRONIC EXCHANGE	LOW	MODERATE	LOW	LOW-MODERATE
CONTRACTING	LOW	MODERATE	LOW	MODERATE
FORWARD DELIVERABLE CONTRACT MARKETS	LOW	HIGH	LOW	LOW-MODERATE
MANDATORY REPORTING	NONE	NONE	HIGH	MODERATE
EXCLUSIVE AGENCY BARGAINING	LOW	HIGH	HIGH	MODERATE
OWNERSHIP INTEGRATION	HIGH	HIGH	LOW	NONE
JOINT VENTURE	MODERATE	HIGH	LOW	NONE
MARKETING ORDERS	NONE	LOW	HIGH	HIGH
MARKETING BOARDS	NONE	LOW	HIGH	HIGH
INDUSTRIAL RESTRUCTURING	NONE	NONE	HIGH	HIGH
FINE TUNING	LOW	LOW	MODERATE	MODERATE

MARKETING

UNIT II

TEST

1. Match the terms on the left to the proper definition.

____a. Forward Contract

____b. Market Specification Contract

____c. Production Management Contract

____d. Resource Providing Contract

____e. Risk

____f. Speculator

____g. Fixed Price Agreement

____h. Formula Pricing

____i. Delayed Pricing Agreement

____j. Pooled Sales Agreement

____k. Cash Contracts

____l. Contractual Integration

____m. Deliverable Contract

____n. Contract

____o. Commodity

____p. Spot Market

____q. Market Access

____r. Clearinghouse

1. The market state of being easy to enter.
2. A local market that operates on a cash market basis.
3. The combination of production and processing contracts.
4. A readily available, simple form of marketing, where small sales are possible and price is known immediately.
5. A written agreement between a producer and a contractor relating to the delivery and acceptance of a specified product at some future date.
6. Stipulates that most inputs are supplied by the contractor. The former supplies little to the production process except labor and land and is paid based on the volume of output.
7. The possibility of suffering loss due to unknown factors or elements.
8. A device cooperatives use may be called one of the automatic pricing devices. The basic price source is the price at which the cooperative sells the product in relation to operating expenses and the average price during the life of the pool.
9. An oral or written agreement between two or more people.
10. An article of the trade or commerce that can be transported.

TEST

11. The pricing agreements where the price for the commodity is locked in and cannot be changed.

12. A means of achieving the benefits of open market trading along with the benefits of contracting.

13. An agreement between seller and buyer that states goods will be based on local price minus service charge.

14. Price set between producer and contractor concerning the terms of trade in a particular contract with negotiation depending upon the market power of the individuals involved.

15. One who engages in the buying and selling of risk on the chance of great profit.

16. The separate agency associated with a futures exchange through which futures contracts are offset or fulfilled and through which financial settlement is made (also clearing association).

17. Usually signed after production begins, specify the quantity of a product to be delivered, but not the quality. The producer has title to the commodity until delivery and supplies the inputs necessary for production.

18. Usually signed before production of the commodity begins and specify both quantity and quality to be delivered. The producer has title to the commodity until delivery, but often some inputs, such as seed and fertilizer, are supplied by the contractor.

TEST

2. Name the three classes of forward contracting.

   a.

   b.

   c.

3. Identify the markets to which each of the forward contract classes are applied.

   a. Broilers, eggs: ______________________________

   b. Grain, cotton, livestock, other storable commodities: _________________

   c. Vegetables for processing, other perishable commodities: ______________ _________________________

4. List the advantages for both contractors and producers of using a market specification contract contractor.

   Contractor: a.

   b.

   c.

   d.

   e.

   Producer: a.

   b.

   c.

   d.

   e.

5. List the advantages of using production management contracts for both the processor and producer.

   Processor: a.

   b.

   c.

   d.

   e.

   f.

TEST

Consumer: a.

b.

c.

d.

e.

6. List the advantages of using resource providing contracts for both the integrator and producer.

Integrator:

a.

b.

Producer: a.

b.

7. Explain in writing the pricing mechanism for forward contracts.

8. Describe in writing the economic implications of forward contracting.

9. List five (5) benefits of forward deliverable contract markets.

a.

b.

c.

d.

e.

TEST

10. Select from the list below the characteristics of a forward deliverable contract. Mark these true characteristics with an X.

____a. Creates a market for contracts that would always result in delivery.

____b. Delivery is direct from seller to buyer.

____c. Producers can enter this form of market with the services of a broker.

____d. Readily available and simple.

____e. Small sales possible.

11. List four necessities for a successful forward deliverable contract.

a.

b.

c.

d.

12. List four alternatives for trading forward deliverable contract.

a.

b.

c.

d.

13. Discuss in writing five advantages of forward deliverable contract marketing.

a.

b.

c.

d.

e.

TEST

14. Discuss in writing the three disadvantages of forward deliverable contract marketing.

    a.

    b.

    c.

15. Explain the difference between a cash forward contract and a delayed pricing contract.

16. Name four benefits of cash marketing.

    a.

    b.

    c.

    d.

17. Name two disadvantages of cash marketing.

    a.

    b.

18. Discuss in writing the four elements to include in a contract.

19. Explain in writing how pooled sales agreement works.

20. Discuss in writing the three marketing functions.

UNIT II

ANSWERS TO TEST

1. a. 5
   b. 17
   c. 18
   d. 6
   e. 7
   f. 15
   g. 11
   h. 14
   i. 13
   j. 8
   k. 4
   l. 3
   m. 12
   n. 9
   o. 10
   p. 2
   q. 1
   r. 16

2. Market specification contract, production management contracts, resource providing contracts.

3. a. Resource Providing Contracts
   b. Market Specification Contracts
   c. Production Management Contracts

4. A. Contractor Advantages:
   1. Fixing a price prior to harvest
   2. Assurance of a particular quantity and quality to meet commitment to the customers of the contractors
   3. Amount of output which is contracted in any one production season tends to be volatile and dependent upon anticipated supplies for that particular season.
   4. Control through contract terms of quality or timing of deliveries.
   5. Speculation by fixing price through the contract.

   B. Producer Advantages:
   1. Assurance of a market at time of harvest
   2. Establishing a known price in advance of harvest time
   3. Price risk is shifted to the contractor

ANSWERS TO TEST

4. Fixed price contracts have a favorable impact on the ability of the producer to obtain a production loan (assures some cash flow)

5. Speculation

5. A. Processor

   1. Secures particular quality and quantity of product
   2. Secures timing of deliveries
   3. Processing costs are minimized
   4. Achieves high degree of quality control
   5. Minimizes time lag by scheduling product to match capacity of processing facilities.
   6. Increases coordination and reduces cost of operation

   B. Producer

   1. Assures a market
   2. May assure a price
   3. Price risk shifted to contractor
   4. Production loans easier to obtain
   5. Farmer incentive for entering such arrangements is primarily market access

6. Advantages of resource providing contracts

   A. Integrator

   1. Reduce costs of production through the coordination and singular managerial control of more than one marketing level. Note: This can include the ability to specify cultural practices, quality and quantity produced, timing of production and delivery, as well as input cost control.
   2. All price risk is with the integrator.

   B. Producer (farmer)

   1. Market access. Note: Often, without such a prior arrangement, output cannot be sold.
   2. Production process is basically free from risk

ANSWERS TO TEST

7. A. Market specification and production management forward contracts have either a fixed price or formula price which is most commonly set by individual negotiation between producer and contractor.

B. Individual buyers and sellers discuss price and other terms of trade in a particular contract until some mutual agreement is reached.

C. Outcome of negotiations largely depends on the relative market power of the individual involved.

D. A group of producers may form a bargaining association which negotiates a base contract price and terms for all members of the association.

E. Even with group bargaining, individual producers are usually free to negotiate with processors or buyers in an effort to secure better price or terms of trade.

F. Formula pricing allows the commodity price to be fixed after the contract is signed.

G. The formula may reflect many factors and can be based on spot market price for the processed commodity or on prices in the future market.

H. Formula contract prices in market specification and production management contracts are sometimes based on a particular month of the futures market contract for the same commodity.

I. Under resource providing contracts, output at the farm gate level is not priced.

J. These contracts usually reimburse the farmer for inputs in the production process (eg., labor, land, buildings).

K. Resource providing contracts could simply provide a fixed return based on volume of output, such as dollars per pound of gain.

8. A. Competition and Market Access

B. Allocation of Risk

C. External Effects Note: Contracting allows processors close coordination of deliveries with plant needs.

D. Effects on Consumers Note: Consumers may or may not benefit as as result of a shift from spot market transactions to contracting. Contracting can be used to reflect consumers' quality desires to producers prior to production.

ANSWERS TO TEST

9. A. Could result in more accurate and timely prices
   B. More efficient allocation of resources
   C. Greater access to market
   D. Greater market power for producers
   E. Reduced transactions costs for processors

10. a. X
    b. X
    c. X

11. A. A sufficiently large number of buyers and sellers to form a competitive market
    B. An accurately describable commodity
    C. Genuine buyer and seller interest
    D. A large volume of transactions

12. A. Computerized exchange for matching producer price offers and processor price bids
    B. Telephone exchange that would make the match manually
    C. Telephone or teletype auctions
    D. "Trading Pit," as is used in most future markets

13. A. Operational Efficiency
    1. Efficient, high volume exchange system that could centralize transactions over a broad geographic area.
    2. Actual operation costs of FDCM could be less than the costs of spot transactions
    3. Could permit automatic adjustment of bids and offers to account for transportation costs between all sellers and buyers.

ANSWFRS TO TEST

B. Pricing Efficiency

  1. Comparison of prices over quality, quantity, location, and time could be facilitated by computerized market reports and by price quotations.

  2. Could more systematically allocate each quality of available supplies among processors

C. Market Power, Market Access, and Competition

  1. Provides a more competitive market

  2. More accessibility to market information so producers have more information

  3. Producers have access to a number of buyers instead of only one or two local buyers.

D. External Effects

  1. Could encourage a shift from spot markets to contracting by making contracting more convenient and more equitable for processors and producers

  2. Development of futures market for processed products

E. Effects on Consumers

  1. Could benefit from lower costs due to increased pricing efficiency

  2. If wholesale and retail markets were competitive, consumers could benefit

14. A. The producer must search for an individual buyer willing to enter into a forward deliverable contract

  1. Difficult

  2. Time-consuming

  3. Not unusual for a producer to find no one willing to forward contract his product.

B. The prices negotiated in these contracts are typically not public knowledge

  1. The producer's profit then becomes a function of not only his productive efficiency, but of his individual bargaining skill as well.

ANSWERS TO TEST

2. Often forced to deal with a large-volume buyer who has much better access to market information and current price levels than he does.

C. There is typically no formal mechanism for settling disputes

1. A producer may find that if the market price has fallen substantially below the contract price, his product is no longer "in grade" as far as the buyer is concerned.

2. Each party has access to the courts should the other party default.

    a. Expensive

    b. Time-consuming

15. How a Cash Forward Contract Works

In March, the following marketing opportunity is available to you for corn:

CBT December futures	$2.70
Less: basis	.25
Cash Price at harvest	$2.45
Less: Estimated Cost of Production	$2.25
Net Profit per Bushel	$ .20

The basis is reasonable and you can net a small profit. A cash forward contract can be used to lock in that profit, eliminating risk on that portion of the crop contracted.

How a Delayed Price Contract Works

You are harvesting corn and you are running out of storage space. This is the situation you find at your local elevator.

Cash Corn Price	$2.00/bu.
Storage - 3 cents per month	
Interest (10%) 2 cents per month	
Storage and Interest for 5 months	.25/bu.

Therefore, you would need $2.25 per bushel in March to equal $2.00 at harvest.
You sign a DELAYED PRICE CONTRACT that allows you to set the price posted at the elevator any given day before March 31. Assume that on March 20, cash corn is:

CASH CORN	$2.31
Less: Interest at 2 cents/mo.	.10
Real Net Price	$2.21/bu.

ANSWERS TO TEST

16. A. Readily available and simple

    B. Small sales possible

    C. Price known immediately

    D. No cash expense

17. A. Cash price usually lower than futures

    B. Loss of flexibility

18. A. Who -- identifies buyer and seller

    B. What -- identifies the commodity, quality and quantity

    C. Where -- specify delivery point and method of delivery when possible

    D. When -- specify time and method of payment as well as penalties for later or early delivery

19. A. The producer is paid an advance covering part of the value of his product.

    B. When the season is over, a part of the next proceeds is distributed as final payment of the goods.

    C. In basing point price systems, one or more locations may be chosen as basing points.
    Note: A base price is announced for each basing point, and prices at other points are calculated by adding transportation costs.

20. A. The Exchange Function - transfer of title and merchandising

    B. The Physical Function

    1. Transportation

    2. Storage

    C. The Facilitating Function

    1. Standardization of product

    2. Financing

    3. Market information

    4. Risk-bearing
        a. Physical risk
        b. Price risk

MARKETING

UNIT III

FUTURES MARKETS INTRODUCTION

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to identify the historic background, facilities, structure and purpose of the futures markets. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match the terms associated with futures markets.
2. List six facts about the historical background of futures markets.
3. List the areas of organizational structure of exchanges.
4. Select the agricultural commodities that are actively traded.
5. List four mechanics of the trading floor.
6. Define the five types of futures orders.
7. List five advantages of hedging.

MARKETING

UNIT III

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Historical Background

   TM 2 - Futures Exchanges and Contracts

   TM 3 - Futures Prices

   TM 4 - Corn Futures Contract

   TM 5 - Live Hog Futures

   TM 6 - Feeder Cattle Futures

   TM 7 - Live Cattle Futures

INSTRUCTIONAL MATERIALS

TM 8 - Soybean Futures Contract

TM 9 - Wheat Futures Contract

TM 10- Order Execution Process

TM 11- Trading Floor

TM 12- Roles of Hedgers and Speculators

TM 13- Hedging Checklist

4. Student Handout
   SH 1 - Order Execution Process

   SH 2 - Futures Prices
5. Test
6. Answers to Test

References:

1. Futures Market Handbook, Dept. of Economics, Cooperative Extension Service, Kansas State University, Manhattan, Kansas.
2. Profit-Oriented Farm Marketing, Des Moines, Iowa, Farmer's Grain and Livestock Cooperation.
3. Bernstein, Jake, Seasonal Chart Study 1953-1976: An Analysis of Seasonal Cash Commodity Price Tendencies. Winnetka, IL: MBH Commodity Advisors, 1977.
4. Chicago Board of Trade. Commodity Trading Manual, revised edition. Chicago: Chicago Board of Trade, 1976.
5. Commodities and Futures Trading, 1976. (Corporate Law & Practice Course Handbook Series 1976-77; Vol. 223) New York: Practicing Law Institute, 1976.
6. Commodity Research Bureau. Commodity Yearbook. New York: (Annual).
7. Commodity Yearbook Statistical Abstract Service. New York: (Published 3 times per year to supplement Commodity Yearbook).
8. Understanding the Commodity Futures Markets, 1977 edition. New York: Commodity Research Bureau, 1977.
9. Doyle, Thomas L., Jr. Live Cattle, Live Hogs and Frozen Pork Bellies. Los Altos, CA: Futures Research Co., 1976.

INSTRUCTIONAL MATERIALS

10. Lawrence, James C. Your Fortune in Futures: A Guide to Commodity Futures Trading. New York: St. Martin's Press, 1976.

11. Lindsay, Charles. Trident, A Trading Strategy, 2nd ed. Waterloo, IA: Investor Publications, 1977.

12. Powers, Mark J. Getting Started in Commodity Futures Trading, 2nd ed. Cedar Falls, IA: Investor Publications, 1977.

13. Oster, Merrill J. Commodity Futures for Profit. Cedar Falls, IA: Professional Farmers of America, 1978.

14. Parris, Frank G. and Joseph J. Tedesco. The Commodity Market--How It Works, revised and enlarged edition. Ft. Lauderdale, FL: Parris & Company Commodity Service, 1976.

15. Prestbo, John, ed. The Dow Jones Commodities Handbook: A Guide to Major Futures Markets. Princeton, NJ: Dow Jones Books, 1977.

Audio-Visual Materials

C.M.E. Films:

1. What It Takes to Speculate--16 mm, color, sound. Available on loan from Modern Talking Pictures, 2020 Prudential Plz., Chicago, IL 60601. (312) 337-3252. About 15 minutes.

2. Your Profit in Futures--(Hedger) 16 mm, color, sound. Available on loan from the Farm Film Foundation, 1425 H Street, NW, Washington, D.C. 20005, (202) 628-1321. About 15 minutes.

Slides and Tapes:

1. Hedging Effectively--35 mm slide/script presentation. Modules for cattle, hogs, eggs, lumber, russet Burbank potatoes, and turkeys. Basic presentation with any one module $25.00. Additional modules $5.00 each. From C.M.E.

INSTRUCTIONAL MATERIALS

2. Hedging with Live Beef Futures, produced by Iowa State University, Ames, IA 50010. 35 mm slide/tape presentation.
3. Using Futures Trading in Live Hogs, 35 mm slides, University of Tennessee, Agricultural Extension Service, Knoxville, TN 37901.
4. The Commodity Futures Market, (General Introduction to Futures Markets and Hedging) 35 mm slides. Oregon State University, Department of Agricultural Economics, Corvallis, OR 97331.

Video Tape

1. "Principles and Application of Hedging," 104 minutes with instruction manual, Agricultural Extension Service, North Carolina State University, Raleigh, NC 27607.

MARKETING

UNIT III

INFORMATION SHEET

I. Terms and Definitions

A. Basis - the difference between the "cash" price at any particular location and the price of a designated futures contract
Example: Cash prices 20 cents below the May futures price would be expressed as a basis of "20 under May."

B. Bear - one who belives prices will decline

C. Bear market - one where large supplies cause a decline in price

D. Bid - a price offered subject, unless otherwise stated, to immediate acceptance for a specified amount of commodity

E. Board Order or Market If Touched (MIT) Order - an order to buy or sell when the market reaches a specific point. A board order to buy becomes a market order when the commodity sells (or is offered) at or below the order price. A board order to sell becomes a market order when the commodity sells (or is bid) at or above the order price.

F. Break - a sharp price decline

G. Broker - (1) A person paid a fee or commission for acting as an agent in making contracts or sales

(2) Floor broker - a person who actually executes orders on the trading floor of an exchange

(3) Account executive - the person who deals with customers in commission house offices

H. Brokerage - the fee charged by a brokerage firm for execution of a transaction

(NOTE: In the case of corn or soybeans on the Chicago Board of Trade, the fee is $30 to $40 for a complete (in and out) trade.)

I. Bulge - a sharp price advance

J. Bull - one who believes prices will advance

K. Bull market - one where small supplies and/or strong demand cause prices to rise sharply

INFORMATION SHEET

L. CBT - Chicago Board of Trade

M. CFTC - Commodity Futures Trading Commission,a federal regulatory agency established by Congress in 1975

N. Clearing House - an agency connected with commodity exchanges which provides the mechanism by which all futures contracts are made, offset, or fulfilled through delivery of the commodity and through which financial settlement is made

O. Close - the period at the end of a trading day during which all trades are officially declared as having been executed "at or on the close." The closing range of prices on trades made during this designated period

P. Corner - to corner is to secure enough control of a commodity so that its price can be manipulated

Q. Cover - the purchasing of futures to offset a previously established short position

R. Day Orders - an order placed that is valid for one day only. If it is not executed the day it is placed, it is automatically cancelled

S. Delivery Month - the calender month during which a futures contract matures

T. Delivery Notice - the notification of delivery of the actual commodity on the contract, issued by the seller of the futures to the Clearing House

U. Delivery Points - the locations designated by commodity exchanges at which a commodity covered by a futures contract may be delivered in fulfillment of the contract

V. Inverted Market - a futures market in which the nearby months are selling at premiums to the more distant months, hence, a market displaying "inverse carrying charges"

W. Limit (up or down) - the maximum price advance or decline from the previous day's settlement price permit in one trading session by the rules of the exchange

X. Liquidation - the closing out of a long position. It is also used to denote closing out a short position, but this is more often referred to as "covering "

Y. Liquid Market - a market where selling and buying can be accomplished with ease, due to the presence of a large number of buyers and sellers

INFORMATION SHEET

Z. Long - one who has bought a cash commodity or a commodity futures contract, in contrast to a short, who has sold a cash commodity or futures contract

AA. Margin - (1) An amount of money deposited by both buyers and sellers of futures contracts to insure performance against the contract

(2) Profit margin - the difference between the price which one pays for goods and the price at which the goods or products are resold

BB. Margin Call - a request to deposit either the original margin at the time of the transaction, or to restore the margin account to required levels after a loss in the futures position has occurred

CC. Offset - the liquidation of a purchase of futures through the sale of an equal number of contracts of the same delivery month, or the liquidation of a short sale of futures contracts through the purchase of an equal number of contracts of the same delivery month. Either transaction transfers the obligation to make or take delivery of the actual commodity to other persons

DD. Open Contracts - Contracts which have been bought or sold without the transaction having been completed by subsequent sale or repurchase, or actual delivery or receipt of commodity

EE. Open Interest - the total of unfilled or outstanding futures contracts, on one side of the market. In any one delivery month the short interest always equals the long interest, since the total number of contracts sold must equal the total number bought

FF. Open Outcry - a method of public outcry for making bids and offers in the trading pits or rings of a commodity exchange

GG. Position Limit - The maximum number of contracts a speculator can hold "open" under the rules of the CFTC

HH. Price Limit - maximum price advance or decline from the previous day's settlement price permitted for a commodity in one trading session by the rules of the exchange

II. Pyramiding - using the profits on previously established positions as margin for adding to that position

JJ. Scalper - a speculator operating on the trading floor who provides market liquidity by buying and selling rapidly with

INFORMATION SHEET

small profits or losses and who holds his position for a short time. Typically, a scalper stands ready to buy at a fraction below the last transaction price, and to sell at a fraction above

KK. Selling Hedge (short hedge) - selling futures contracts to protect against possible decreased prices of commodities which will be sold in the future.

LL. Short - the selling side of an open futures contract; also refers to a trader whose net position shows an excess of open sales over open purchases

MM. Speculator - one who attempts to anticipate commodity price changes and makes profits through the sale and/or purchase of commodity futures contracts. A speculator assumes the risk of the hedger.

NN. Spreads - price difference between two different contract months, such as March and July corn. Or price difference between two different commodity markets wheat. Spread transactions might include buying one such contract and selling the other

OO. Stop Order or Stop Loss Order - an order entered to buy or sell when the market reaches a specified point. A stop order to buy becomes a market order when the commodity sells (or is offered) at or below the stop price. The purpose of a stop loss order is to limit losses or protect a profit

PP. Technical Rally (or Decline) - a price movement resulting from conditions developing within the futures market itself and not dependent on outside supply and demand factors. These conditions would include changes in the open interest, volume, degree of recent price movement and approach of first notice day

II. Historical Background

A. Active commodity markets, under rules and regulations, existed in China, Egypt, Arabia, and India 12 centuries before the birth of Christ

B. Japan's markets in the late 1600's resembled today's markets

C. England and other Eurpoean countries started active trading in the early 1800's

INFORMATION SHEET

D. By 1848, Chicago became the crossroads for buyers and sellers of grain and the Chicago Board of Trade was established. (CBT)

E. Kansas City Board of Trade opened in 1856, becoming a major grain market. (KCBT)

F. Chicago Produce Exchange opened in 1874 and in 1898 was changed to the Chicago Butler and Egg Board only to be changed in 1919 to the Chicago Mercantile Exchange. (CME)

G. First successful futures contract in a live, nonstorable commodity was in 1964 -- live cattle

H. In 1966 a live hog contract was established

I. Feeder cattle contracts were added in 1971

III. Organizational Structure of Exchanges

A. Administration

1. Regulated by CFTC (Commodity Futures Trading Commission) of the Federal Government.

2. Board of Governors and Directors

3. Principal Employees

    a. President

    b. Administrator

    c. Executive vice-president

    d. Senior vice-president

    e. Department managers

    f. Pit clerks

    g. Board markers

    h. Statisticians

    i. Data processing personnel

4. Principal Departments

    a. Audits and investigations

INFORMATION SHEET

b. Clearing house

c. Research and education

d. Public relations

B. Members - Basis of qualifications

1. Financial

2. Moral

3. Commercial standing

4. Must be licensed by the Commodity Futures Trading Commission

C. Clearing Members - qualifications include:

1. That the specified number of the officers, directors, or partners of the firm or organization be exchange members

2. That the applicant meet the financial criteria established by the Board(s) in compliance with Federal rules

3. That the applicant demonstrate possession of adequate facilities and know-how to meet requirements

4. That the applicant meet specified standards of business integrity

IV. Commodities Traded

A. Chicago Board of Trade - wheat, corn oats, soybeans, soybean oil, soybean meal, iced broilers, plywood, stud lumber, Gulf wheat, gold

B. Chicago Mercantile Exchange - Turkeys, fresh eggs, frozen eggs, nest eggs, Idaho potatoes, live cattle, live hogs, frozen pork bellies, lumber, live feeder cattle, grain sorghum

C. Kansas City Board of Trade - wheat, corn

V. Mechanics of the Trading Floor

A. Pit - Octagonal structure 3 feet above floor level with center at floor level. This is where contracts are traded.

B. Hours - 9:30 a.m. to 1:15 p.m.

INFORMATION SHEET

C. Pulpit (box or booth) - cage-like structure where price changes and transactions are recorded

D. Hand signals of Pit Traders

1. Blackboards show the full cent value

2. Fingers of hand in horizontal position show fractional prices

3. Fingers of hand in vertical position show quantity of contracts

4. Palms of hand facing outward indicate the trader wants to sell

5. Palms inward indicate a buy

VI. Types of Futures Orders

A. Market order - an order to buy or sell without regard to a specific price

B. Limit order - an order to buy or sell at a specific price

C. Open order - an order to buy or sell at a specific price, but the order stands until executed or cancelled

D. Day order - orders executed on a specific day

E. Stop order - becomes a market order to buy only if prices rise to a specified point or to sell if prices drop to a specified point

VII. Hedging

A. Hedging is risk management

Example: Farmer buys fire insurance - he is hedging against the risk of his barn being destroyed by fires. A corn producer hedges his crop to protect against the chance of a down cash market

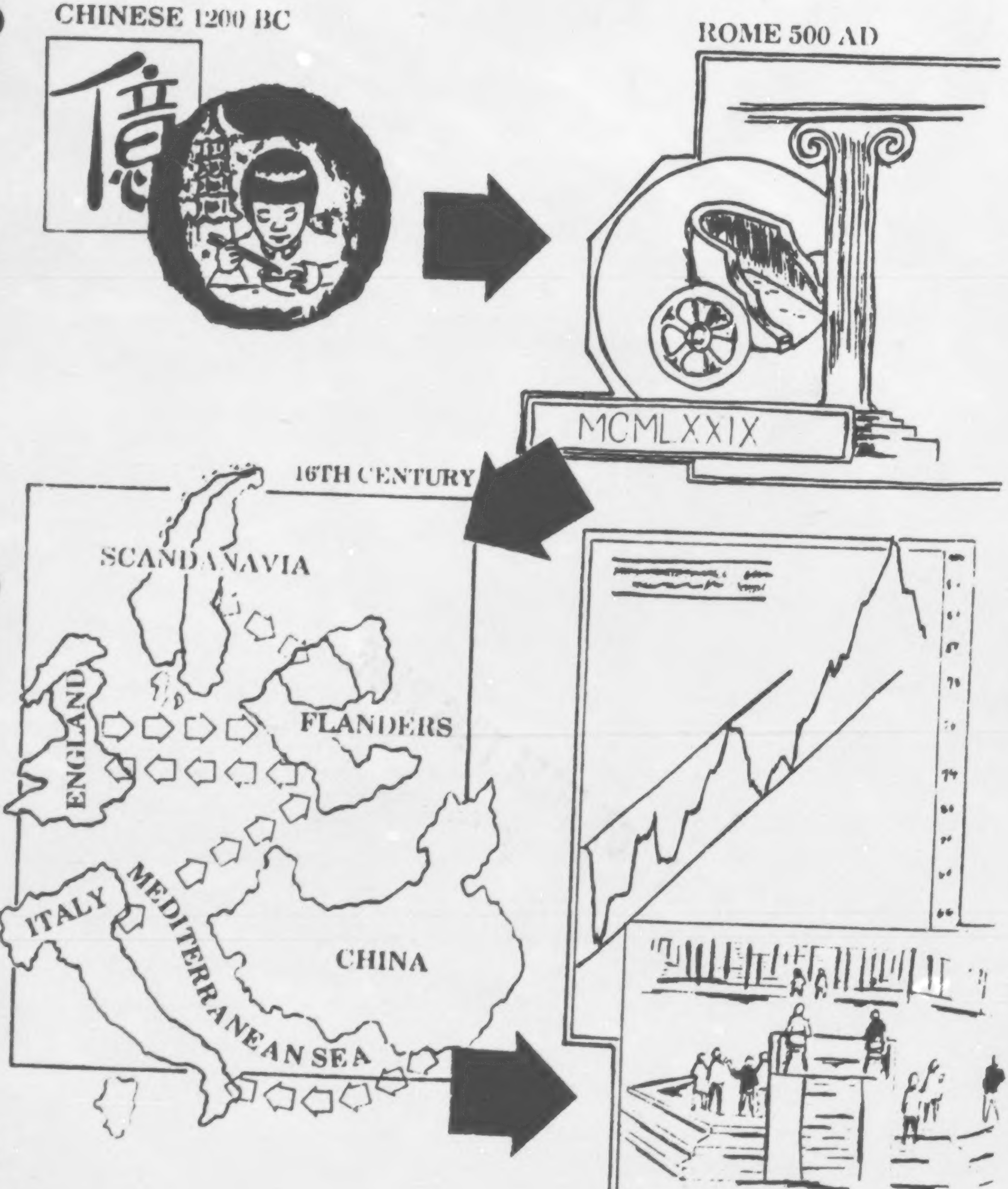
B. The hedger always takes a position in the futures market opposite his positions in the cash market

C. Advantages of hedging

INFORMATION SHEET

1. Insurance against price risk
2. Producers can obtain better credit from financial institutions when his inventory is hedged
3. Hedging often reduces operating costs because finances need not be tied up in storing commodities
4. Price discovery is an important economic function of futures markets
5. Higher levels of management are required of a successful hedger

Historical Background



1850 TO TODAY
CHICAGO BOARD OF TRADE

Futures Exchanges and Contracts

EXCHANGE	COMMODITY
CHICAGO BOARD OF TRADE	WHEAT, CORN, OATS, SOYBEANS, SOYBEAN OIL, SOYBEAN MEAL, ICED BROILERS, SILVER, PLYWOOD, STUD LUMBER, GULF WHEAT, GOLD
CHICAGO MERCANTILE EXCHANGE	TURKEYS, FRESH EGGS, FROZEN EGGS, NEST-RUN EGGS, IDAHO POTATOES, LIVE CATTLE M-W, LIVE HOGS, FROZEN PORK BELLIES, LUMBER, LIVE FEDDER CATTLE, GRAIN SORGHUM
CITRUS ASSOCAITIATED OF THE NEW YORK COTTON EXCHANGE, INC	FROZEN CONCENTRATED ORANGE JUICE
COMMODITY EXCHANGE, INC.	COPPER, MERCURY, SILVER, GOLD
INTERNATIONAL MONETARY MARKET	BRITISH POUND, CANADIAN DOLLAR, DEUTSCHEMAR DUTCH GUILDERS, JAPANESE YEN, MEXICAN PESO, SWISS FRANC, U.S SILVER COINS, CANADIAN SILVER COINS, COPPER, GOLD
KANSAS CITY BOARD OF TRADE	WHEAT, CORN
MIDAMERICAN COMMODITY EXCHANGE	WHEAT, CORN, OATS, SOYBEANS, SILVER, U.S SILVER COINS, LIVE HOGS, GOLD
MINNEAPOLIS GRAIN EXCHANGE	SPRING WHEAT, DURUM WHEAT, OATS
NEW YORK COCOA EXCHANGE	COCOA
NEW YORK COFFEE & SUGAR EXCHANGE	COFFEE, SUGAR #10, SUGAR #11
NEW YORK COTTON EXCHANGE	COTTON
NEW YORK MERCANTILE EXCHANGE	PALLADIUM, PLATINUM, MAINE POTATOES, FROZEN IMPORTED BONELESS BEEF, SILVER COINS, GOLD
PACIFIC COMMODITIES EXCHANGE	COCONUT OIL, SHELL EGGS, WESTERN LIVE CATTLE, SILVER, GOLD
PETROLEUM ASSOCIATES OF THE NEW YORK COTTON EXCHANGE	PETROLEUM
PROPANE ASSOCIATES OF THE NEW YORK COTTON EXCHANGE	PROPANE
WOOL ASSOCIATES OF THE NEW YORK COTTON EXCHANGE	WOOL

Futures Prices

Friday, June 11, 1976

-GRAINS AND FEEDS-

WHEAT (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	370	380½	366	371-370	−10to11	464½	334½
Sept	380	389	375	379½-380	−11to10½	438	342
Dec	401	401	389	391-392	−10½to9½	423	354½
Mar 77	409½	411½	398½	403	−9½	431½	365

Sales Thurs. 10,952 contracts

WHEAT (K.C.)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	391	391	378	380½-380	−9½to10	458	342½
Sept	395	395	385	387½-387	−9to9½	420	350½
Dec	404	404½	396	397-396	−10½to11½	411½	364
Mar 77	414	414	405½	406	−11	420½	373¼
May	416½	418	410	410	−11	421	400

Sales Thurs. 4,178 contracts

WHEAT (MPLS)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	420	420	410	412½-411	−7½to9	442	369
Sept	419	419½	410	412-412½	−8to7½	438	372
Dec	425	426	418½	419¾	−8¾	440	380
Mar 77	436	436	426	426	−11	439	401

Sales Thurs. 1,162 contracts

CORN (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	308½	308½	302	303-304¼	−6to4¾	348	240
Sept	300	300	291½	294½-295	−5¾to5¼	305¼	260
Dec	288	289	282½	284-285	−5¾to4¾	297	254½
Mar 77	297½	297½	290	291	−6½	303	262½
May	298	299½	295	295	−6¾	306	269¾

Sales Thurs. 32,902 contracts

SOYBEANS (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	642	667	642	663-664	+15¾to16¾	685	466
Aug	648	670	646	666-666½	+12¾to13¼	681	469¾
Sept	652	682	651	670-669	+15¼to14¼	682	475
Nov	662	679	650	673-675	+11¼to13¼	679	483
Jan 77	662	683	656	677-679	+10½to12½	683	490
Mar	666	687	667	681-682	+7½to8½	687	504½
May	667	690	667	683½	+5¼	690	511½
July	676	694	674	685-687	+11to5	694	619½

Sales Thurs. 23,719 contracts

SOYBEAN MEAL (CBT)—100 tons; $ per ton

	Open	High	Low	Close	Change	Season's High	Season's Low
July	200.00	207.50	198.00	205.5-206.5	+4.0to5.0	207.50	127.00
Aug	197.50	207.00	197.50	205.00	+4.30	207.00	129.00
Sept	198.00	206.00	197.00	203.50-204	+1.0to4.3	206.00	131.00
Oct	195.00	205.00	195.00	201.50	+3.10	205.00	133.50
Dec	193.00	203.00	193.00	201.-200.50	+3.5to3.0	203.00	137.00
Jan77	193.00	203.50	193.00	200.00	+2.30	203.50	139.70
Mar	193.00	202.70	193.00	199.-198.50	+2.0to1.5	202.70	142.00
May	195.00	202.00	195.00	198.-199.50	+1.5to3.0	202.00	143.50
July	202.00	202.00	202.00	199.00b		202.00	202.00

Sales Thurs. 12,260 contracts

SOYBEAN OIL (CBT)—60,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	18.70	18.91	18.40	18.40-.45	−.40to.35	26.65	15.37
Aug	18.75	19.10	18.52	18.60-.55	−.38to.43	26.00	15.33
Sept	18.70	19.25	18.55	18.75-.70	−.38to.43	21.90	15.55
Oct	19.00	19.35	18.75	18.85-.90	−.50to.45	20.10	15.65
Dec	19.40	19.75	19.15	19.23-.20	−.40to.43	19.75	15.80
Jan 77	19.45	19.80	19.25	19.30	−.40	19.80	16.31
Mar	19.50	19.90	19.40	19.40	−.40	19.95	16.40
May	19.70	20.00	19.52	19.55	−.33	20.05	16.60
July	19.95	20.05	19.70	19.75	−.30	20.15	18.30

Sales Thurs. 10,520 contracts

OATS (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	199	199	194	196½	−1½	208	134½
Sept	191	191	188½	189¼-½	−1to¾	192	135
Dec	190½	190½	185¼	188½	−1	191	146
Mar 77	187½	188	184	188	−¾	189½	153

Sales Thurs. 771 contracts.

OATS (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	167	167	163½	165	−2¾	169	148¾
Oct	167¼	167¼	163¼	163¼	−5¼	169¾	146
Dec	167½	167½	162½	163½a	−4½	169¼	157½

Est. sales 525, sales Thurs.: 708 contracts.

RAPESEED (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	594½	600	592¾	599b	+7	665	466½
Sept	595½	602¾	592	600b	+5½	602¾	490
Nov	590	600½	591	598-598½	+5to5½	608½	485
Jan 77	596	601	593	597b	+4	601	491½

Est. sales 1,200, sales Thurs.: 2,440 contracts.

RYE (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	284¼	286½	281¼	282½b	−7	289	231
Oct	286	286½	281	281½b	−5¾	289	231
Dec	284	284	278¼	278¾a	−6½	289	249

Est. sales 640, sales Thurs.: 730 contracts.

BARLEY (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	222	222	220½	220½	−2½	243¼	220
Oct	230½	230½	228	228¼a	−2¼	232	217½
Dec	228½	229	227	227a	−3	230½	217¾

Est. sales 630, sales Thurs.: 1,030 contracts.

FLAXSEED (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	734	737	725	730	−4	739	633½
Oct	739	744¾	734	737b	−6	745½	626
Nov	743	745	734	737a	−6	745	640
Dec	743	743	734	736b	−5	743	650¾

Est. sales 340, sales Thurs.: 514 contracts

-LIVESTOCK AND MEAT-

CATTLE (CME)—40,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	42.20	42.20	41.17	41.55-.40	−1.00to1.17	49.80	40.00
Aug	46.25	46.25	45.65	46.12-.20	−.25to.17	48.62	42.02
Oct	46.85	47.25	46.70	47.15-.25	+.20to.30	47.60	42.60
Dec	47.42	47.62	47.27	47.55-.62	+.15to.22	47.62	43.10
Feb 77	47.30	47.40	47.05	47.25	+.03	47.40	43.40
Apr	47.10	47.10	46.90	47.00	....	47.10	44.17
June	47.75	47.90	47.75	47.90	+.20	47.90	47.00

Est. sales 9,550, sales Thurs. 10,282 contracts

HOGS (CME)—30,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	51.85	52.62	51.65	52.45-.62	+.60to.77	56.00	41.00
July	51.75	52.75	51.37	52.75-.60	+1.13to.98	56.15	40.90
Aug	48.15	48.97	47.70	48.85-.97	+.80to.92	53.00	38.50
Oct	45.05	45.90	44.75	45.80-.90	+.80to.90	50.90	36.40
Dec	44.50	44.75	43.90	44.60-.75	+.30to.45	44.75	37.50
Feb 77	44.00	44.25	43.70	44.25	+.30	44.25	39.00
Apr	42.10	42.63	42.00	42.50-.65	+.45to.60	42.65	38.00
June	43.65	43.80	43.60	43.80b	+.25	43.80	39.30
July	43.85	43.95	43.65	43.85	+.15	43.95	39.30

Sales 4,221, sales Thurs. 4,215 contracts.

PORK BELLIES (CME)—36,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	79.25	80.60	79.00	80.55-.60	+1.95to2.00	94.95	64.50
Aug	76.50	77.90	76.15	77.90-.70	+1.80to1.60	92.45	62.25
Feb 77	68.70	69.85	68.40	69.80-.85	+1.93to1.98	69.85	56.90
Mar	68.70	69.65	68.25	69.20-.65	+1.80to1.95	69.65	56.05
May	68.30	69.75	68.45	69.70	+1.95	69.75	59.75

Est. sales 6,428, sales Thurs.: 6,268 contracts.

ICED BROILERS (CBT)—30,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	42.30	42.50	40.35	40.25	−.15	42.70	28.45
July	42.90	43.00	42.85	42.90	+.10	43.00	30.50
Aug	43.00	43.05	42.95	42.97	+.12	43.40	30.00
Sept	41.45	41.90	41.40	42.00	+.50	42.10	37.75
Nov	39.70	40.15	39.70	40.10-.15	+.45to.50	40.15	36.90
Jan 77	41.10	41.40	41.10	41.30	+.40	41.40	38.50

Sales Thurs.: 1,034 contracts

-FOODS-

FRESH EGGS (CME)—22,500 doz.; cents per doz.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	56.35	56.50	56.05	56.15	+.25	56.50	42.85
July	56.00	56.10	55.00	55.00-.40	−.40to unch	56.10	47.90
Aug	55.50	55.70	55.50	55.50		55.70	50.25
Sept	58.00	58.85	58.05	58.05	−.80	59.00	50.25
Nov	59.25	59.65	59.25	59.35	.55	59.90	50.20
Dec	61.50	61.85	61.20	61.30-.20	−.25to.35	62.00	54.00

Est. sales 254, sales Thurs.: 339 contracts

MAINE POTATOES (NYM)—50,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
Nov	5.38	5.40	5.23	5.30	−.07	6.56	5.08
Mar 77	6.50	6.50	6.31	6.35	−.09	7.30	5.85
Apr	7.05	7.05	6.91	6.95	−.10	7.75	6.60
May	8.25	8.25	8.02	8.05	−.30	8.90	7.55

Est. sales 324; sales Thurs. 440 contracts

IDAHO POTATOES (CME)—80,000 lbs., cents per lb.

No sales.

SUGAR, WORLD (CSE)—112,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	12.70	12.95	12.65	12.80-.86	+.16to.22	25.10	11.05
Sept	13.25	13.45	13.25	13.30-.35	+.24to.21	19.08	11.05
Oct	13.50	13.67	13.47	13.56-.59	+.17to.20	18.95	11.00
Mar 77	13.71	13.85	13.71	13.75-.73	+.13to.11	15.57	12.82
May	13.80	13.86	13.76	13.75n	+.05	15.51	12.79
July	13.77	13.90	13.77	13.82-.79	+.11to.08	15.42	13.30
Sept	13.75	13.90	13.75	13.80	+.07	15.35	13.27
Oct	13.78	13.90	13.78	13.80-.78	+.05to.03	15.15	13.78

Est. sales 6,600; sales Thurs. 4,696 contracts

Spot 12.05n

COFFEE (CSE)—37,500 lbs., cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	151.10	151.10	151.10	151.10b	+3.00	151.10	55.60
Sept	151.30	151.30	151.30	151.30b	+3.00	151.30	77.00
Dec	146.65	146.65	146.65	146.65b	+3.00	146.65	82.10
Mar77	142.00	142.00	141.80	142.00b	+3.00	142.00	94.86
May	141.00	141.00	140.70	141.00b	+3.00	141.00	121.50

Est. sales 422, sales Thurs. 745 contracts

COCOA (CEX)—30,000 lbs., cents per lb.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
July	97.30	97.30	96.70	97.25	−.65	99.00	41.65
Sept	92.50	92.50	91.20	92.00	−.30	94.05	43.26
Dec	82.30	82.91	81.70	82.75	−.15	84.10	45.20
Mar 77	77.20	77.90	77.00	77.85	+.05	78.95	48.50
May	74.65	74.65	74.00	74.60	+.05	75.50	52.45
July	71.25	71.65	71.00	71.50	+.05	71.65	58.10
Sept	69.00	69.40	68.60	69.20	+.05	69.40	57.10

Est. sales 965, sales Thurs. 2,347 contracts

ORANGE JUICE (CTN)—15,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	56.55	56.65	54.75	55.10	−1.55	68.50	54.75
Sept	56.90	56.90	54.60	55.35	−1.65	69.50	54.60
Nov	57.50	57.50	55.50	56.00	−1.75	69.20	55.50
Jan 77	58.50	58.50	56.50	57.00	−1.45	70.25	56.50
Mar	59.50	59.50	58.00	58.20b	−1.30	69.90	58.00
May	60.30	60.40	59.20	59.20b	−1.30	69.75	59.20

Est. sales 600, sales Thurs.: 140 contracts.

-METALS-

COPPER (CMX)—25,000 lbs.; cents per lb.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
June	70.80	70.90	70.80	71.30	+1.30	75.20	62.80
July	71.30	71.80	70.90	71.70	+1.40	75.80	55.20
Sept	72.30	72.70	72.00	72.70	+1.40	76.60	56.30
Dec	74.30	74.60	73.70	74.40	+1.30	77.60	57.60
Jan 77	74.80	74.80	74.20	74.80	+1.20	77.80	58.20
Mar	75.50	75.70	75.10	75.60	+1.20	78.30	59.90
May	76.30	76.60	76.00	76.40	+1.20	78.70	66.20
July	77.20	77.20	76.90	77.20	+1.20	77.20	73.00

Est. sales 9,050, sales Thurs.: 7,273 contracts

SILVER (CMX)—5,000 troy oz.; cents per troy oz.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
July	494.00	496.30	488.00	496.00	+4.00	575.00	390.00
Sept	497.00	500.00	491.50	499.60	+3.30	583.00	396.00
Dec	505.00	507.50	498.50	507.10	+3.30	591.20	404.30
Jan77	507.50	509.00	503.00	509.60	+3.20	539.50	408.00
Mar	512.50	516.00	507.00	514.70	+3.10	514.50	412.00
May	518.00	521.00	513.00	520.10	+3.10	520.00	419.30
July	523.00	523.00	519.00	525.60	+3.10	525.00	442.00
Sept	528.50	528.50	525.30	531.20	+3.10	531.00	455.40

Est. sales 13,990, sales Thurs. 27,554 contracts

SILVER (CBT)—5,000 troy oz.; cents per troy oz.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	494.00	499.00	490.00	499.5-498.5	+4.5to4.0	577.00	386.50
July	497.50	499.00	497.50	499.00	+3.30	499.00	439.00
Aug	494.50	500.00	490.60	499.00-500	+3.5to4.5	580.00	392.50
Oct	499.00	503.00	493.80	502.00-.50	+3.0to3.5	588.00	398.50
Dec	503.50	508.00	498.00	507.00-.50	+2.8to3.3	596.00	404.00
Feb77	508.50	513.00	505.00	512.-511.50	+3.0to2.5	513.00	409.50
Apr	514.00	517.50	510.00	517.00-.50	+2.3to2.8	518.50	415.00
June	520.00	522.00	515.50	522.00	+2.00	522.00	421.00
Aug	524.50	527.00	522.00	527.00	+1.50	527.00	446.00
Oct	529.30	532.50	528.50	532.50	+1.50	532.50	476.50

Sales Thurs.: 10,033 contracts.

SILVER COINS (NYM)—10 $1000 bags; $ per bag

	Open	High	Low	Close	Change	Season's High	Season's Low
July	3465	3465	3435	3470b	+5	3960	2745
Oct	3493	3500	3480	3510b	+3	4010	2810
Apr 77	3600	3645	3595	3620a	+8	3645	2915
July	3650	3695	3650	3680a	+8	3695	3050

Est. sales 125, sales Thurs. 279 contracts

PLATINUM (NYM)—50 troy oz., $ per troy oz.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	172.00	172.40	168.00	171.20		193.70	126.30
Oct	175.00	176.50	172.30	175.10	+.10	196.00	128.60
Jan77	180.00	180.20	177.00	178.90a	+.10	198.50	141.80
Apr	183.00	183.00	180.20	182.20a		183.40	145.80
July	187.10	187.10	184.50	185.00b		187.10	146.00
Oct	190.10	190.10	190.10	190.90a	+.10	190.10	170.90

Est. sales 942, sales Thurs. 864 contracts.

GOLD (CMX)—100 troy oz.; $ per troy oz.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
June	126.30	126.30	125.40	125.80	−.90	209.80	123.00
July	126.60	126.60	126.60	126.20	−1.00	129.60	126.40
Aug	127.50	127.50	126.50	126.90	−.90	191.00	125.00
Oct	129.00	129.00	128.00	128.40	−1.10	193.00	126.10
Dec	130.70	130.70	126.70	130.00	−1.00	185.70	126.70
Feb77	132.50	132.50	131.20	131.60	−1.10	162.00	128.00
Apr	133.50	133.50	133.20	133.20	−1.10	150.60	129.10
June	135.90	136.00	135.00	134.80	−1.10	141.50	131.20
Aug	136.50	137.00	136.50	136.40	−1.10	140.80	132.90

Est. sales 1,711, sales Thurs. 4,943 contracts.

GOLD (IMM)—100 troy oz.; $ per troy oz.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	126.50	126.50	125.60	126.20	−.40	227.00	123.90
Sept	128.50	128.50	127.20	127.60-.20	−1.2to1.6	195.00	125.00
Dec	130.70	130.70	129.50	130.2-129.8	−.90to1.3	193.00	127.00
Mar77	133.20	133.20	132.20	132.50	−1.30	164.00	129.20
June	135.90	135.90	134.90	135.2-134.9	−1.1to1.4	142.10	131.80
Sept	138.50	138.50	137.80	138.10	−1.10	143.00	134.1

Est. sales 1,155, sales Thurs. 885 contracts

GOLD (WPG)—[illegible] troy oz., $ per troy oz.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	127.20	127.20	125.80	126.30b	−.85	170.00	124.50
Oct	129.40	129.40	128.00	128.40b	−1.00	187.90	126.10
Jan77	130.80	130.90	130.70	130.70b	−1.30	151.00	127.60
Apr	133.00	133.30	133.00	133.20a	−.90	140.30	130.90
July	135.80	135.80	135.70	135.70b	−.80	140.00	135.10

Est. sales 25, sales Thurs. 82 contracts

-FIBERS-

COTTON (CTN)—50,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	79.75	79.75	75.75	79.20-.75	+1.45to2	79.75	45.75
Oct	80.11	80.11	76.11	79.20-.80	+1.09to1.69	80.11	47.90
Dec	78.25	78.29	74.79	77.00-.50	+.21to.71	78.29	50.00
Mar 77	77.60	77.85	74.40	75.70-.90	−.70to.50	77.85	56.25
May	77.10	77.10	73.10	74.60b	−.50	77.10	58.90
July	73.50	73.70	71.52	72.02	−1.50	73.70	60.50
Oct	69.00	69.00	67.90	67.90a	−2.00	69.90	63.35

Est. sales 9,500, sales Thurs. 2,704 contracts

WOOL (CTN)—6,000 lbs., cents per lb.

No sales. Spot 180.0n

-WOOD-

LUMBER (CME)—100,000 bd. ft.; $ per 1000 bd. ft.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	150.50	152.30	149.50	152.-151.70	+2.4to2.1	183.30	119.20
Sept	158.00	159.60	157.90	159.50-.60	+1.9to2.0	182.00	154.00
Nov	160.40	162.00	159.90	161.90-162.	+2.4to2.5	178.00	154.00
Jan77	164.50	166.50	164.40	166.30	+2.30	179.00	161.80

Est. sales 1,515, sales Thurs. 1,337 contracts

PLYWOOD (CBT)—76,032 sq. ft.; $ per 1000 sq. ft.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	148.50	151.80	148.10	151.00-.50	+4.1to3.6	169.30	125.50
Sept	151.80	154.20	151.00	154.20	+3.50	170.40	127.00
Nov	153.50	155.00	152.50	155.00	+3.00	169.20	127.50
Jan77	154.50	156.50	153.40	156.20-.50	+2.8to3.0	171.00	140.00
Mar	156.00	157.80	154.50	157.80	+2.80	172.50	151.50
May	157.30	160.00	156.00	159.00-160.	+3.0to4.0	172.50	152.00
July	157.90	160.50	157.30	160.50n	+3.00	160.50	155.00

Sales Thurs. 498 contracts.

-FINANCIAL-

MEXICAN PESO (IMM)—1 million pesos; $ per peso

	Open	High	Low	Close	Change	Season's High	Season's Low
June	.08000	.08000	.07979	.07979	−.00031	.08000	.07349
Sept	.07735	.07755	.07725	.07740	+.00010	.07944	.07037
Dec	.07484	.07510	.07450	.07450	+.00018	.07919	.06622
Mar77	.07160	.07222	.07115	.07139	+.00009	.07400	.06140
June	.06787	.06787	.06675	.06675	....	.06936	.05925
Sept	.06500	.06504	.06384	.06399	+.00008	.07056	.05685

Sales Thurs.: 304 contracts.

SWISS FRANC (IMM)—125,000 francs, $ per franc

	Open	High	Low	Close	Change	Season's High	Season's Low
June	.4030	.4030	.4008	.4010	−.0018	.4311	.3780
Sept	.4076	.4080	.4058	.4068	−.0017	.4239	.3765
Dec	.4125	.4125	.4110	.4122	−.0013	.4287	.3867
Mar 77	.4185	.4185	.4160	.4173	−.0011	.4330	.3980

Sales Thurs.: 533 contracts.

BRITISH POUND (IMM)—25,000 pounds; $ per pound

	Open	High	Low	Close	Change	Season's High	Season's Low
June	1.7700	1.7710	1.7700	1.7710	+.0010	2.2800	1.7080
Sept	1.7465	1.7465	1.7415	1.7430	−.0020	2.1160	1.6780
Dec	1.7220	1.7225	1.7220	1.7225	−.0005	2.0640	1.6550

Sales Thurs. 60 contracts

CANADIAN DOLLAR (IMM)—100,000 dlrs; $ per dlr.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	1.0226	1.0230	1.0225	1.0232	+.0017	1.0233	.9715
Sept	1.0141	1.0141	1.0141	1.0141	+.0015	1.0152	.9935
Dec	1.0074	1.0095	1.0074	1.0086	+.0012	1.0105	.9730

Sales Thurs. 91 contracts

DEUTSCHEMARK (IMM)—125,000 marks; $ per mark

	Open	High	Low	Close	Change	Season's High	Season's Low
June	.3880	.3887	.3880	.3887	+.0010	.4455	.3835
Sept	.3910	.3910	.3904	.3910	+.0010	.4410	.3860
Dec	.3929	.3929	.3925	.3929	+.0002	.4037	.3895

Sales Thurs. 313 contracts

JAPANESE YEN (IMM)—12.5 mil. yen, cents per yen

No sales.

GNMA 8% (CBT)—$100,000 prncpl; pts., 32nds of 100%

	Open	High	Low	Close	Net Chg.	Yield Close	Yield Chg
June	96-02	96-07	96-02	96-07	+5-32ds	8.483	−.022
Sept	94-29	95-01	94-26	95-01	+2-32ds	8.654	−.009
Dec	94-08	94-04	93-31	94-04	+1-32ds	8.787	−.004
Mar77	93-10	93-12	93-08	93-12	−2-32ds	8.898	+.011
June	92-26	92-27	92-23	92-27		8.978	
Sept	92-11	92-11	92-04	92-09	−3-32ds	9.063	+.010

U.S. TREASURY BILLS (IMM)—$1 mil.; points of 100%

	Open	High	Low	Close	Net Chg.	Yield Close	Yield Chg
June	94.47	94.54	94.47	94.54	+.06	5.46	−.06
Sept	93.67	93.75	93.66	93.75	+.06	6.25	−.06
Dec	92.95	93.04	92.93	93.00	+.06	6.97	−.06
Mar 77	92.38	92.45	92.37	92.45	+.03	7.55	−.03
June	91.86	91.94	91.86	91.92	+.06	8.08	−.06

Est. sales 385, sales Thurs. 238 contracts

a-Asked. b-Bid. n-Nominal. s-Settlement price, determined by exchange, is used for close.

(CBT) Chicago Board of Trade; (KC) Kansas City Board of Trade; (MPLS) Minneapolis Grain Exchange; (WPG) Winnipeg Commodity Exchange; (CME) Chicago Mercantile Exchange; (NYM) New York Mercantile Exchange; (CSE) New York Coffee and Sugar Exchange; (CEX) New York Cocoa Exchange; (CTN) New York Cotton Exchange; (CMX) Commodity Exchange Inc. in New York; (IMM) International Monetary Market of CME.

Corn Futures Contract

TRADING UNIT: 5,000 BUSHELS

MARGIN REQUIREMENT: VARIABLE FROM TIME TO TIME, DEPENDING ON THE LEVEL AND VOLATILITY OF PRICES. INITIAL MARGIN IS A FLAT SUM WHICH GENERALLY APPROXIMATES 10% OF CONTRACT PRICE.

COMMISSION: ROUND TURN $35

DELIVERY POINT: EXCHANGE-APPROVED GRAIN ELEVATORS IN CHICAGO RAIL SWITCHING DISTRICT. DELIVERY MAY ALSO BE MADE TO TOLEDO OR ST. LOUIS AT A DISCOUNT OF 4 CENTS PER BUSHEL UNDER (CHICAGO) CONTRACT PRICE.

PAR DELIVERY: NO. 2 YELLOW CORN

DISCOUNTS OR PREMIUMS: NO.1 YELLOW CORN - ½¢ PREMIUM
NO. 3 YELLOW CORN WITH MAXIMUM MOISTURE 15 ½%
2 ½¢ DISCOUNT

DELIVERY TIME: SELLER MAY DELIVER ON ANY BUSINESS DAY OF THE CONTRACT MONTH, BUT IF NOT PREVIOUSLY DELIVERED, DELIVERY MUST BE MADE UPON THE LAST BUSINESS DAY OF THE MONTH.

DELIVERY COSTS: PAID BY DELIVERER

CONTRACT MONTHS: DECEMBER, MARCH, MAY JULY, SEPTEMBER

MAXIMUM PRICE CHANGE: IN ANY ONE DAY, 10¢ PER BUSHEL FROM PREVIOUS DAY'S CLOSE

PRICE QUOTATIONS AND MINUMUM FLUCTUATIONS: QUOTED IN CENTS AND FOURTHS OF A CENT PER BUSHEL, WITH ¼ ¢ PER BUSHEL (12,50 PER POUND LOT) AS THE MINIMUM CHANGE.

Live Hog Futures

(CHICAGO MERCANTILE EXCHANGE)

TRADING UNIT: 30,000 LBS. (5% VARIATION)

MARGIN REQUIREMENTS: VARIABLE FROM TIME TO TIME, DEPENDING ON THE LEVEL AND VOLATILITY OF PRICES.

COMMISSION: ROUND TURN $40

DELIVERY POINTS: PAR - PEORIA, ILLINOIS
25¢/CWT. DISCOUNT, OMAHA, SIOUX CITY, ST. PAUL, AND E. ST. LOUIS, ILLINOIS
50¢/CWT. DISCOUNT, KANSAS CITY AND ST. JOSEPH

PAR DELIVERY: (A) USDA NOS. 1,2,3, AND 4 BARROWS AND GILTS AVERAGING IN THE RANGE 200 TO 230 LBS.
(B) AT LEAST 90 HOGS MUST WEIGH BETWEEN 200 AND 230 LBS. IN EACH DELIVERY UNIT
(C) HOGS UNDER 190 POUNDS OR OVER 240 POUNDS WILL NOT BE DELIVERABLE

DISCOUNTS: GRADE: NO MORE THAT 8 HEAD OF NO. 4 HOGS AND THOSE AT $2.00/CWT. DISCOUNT. IF MORE THAT 90 HEAD OF USDA NO. 3, THE ENTIRE LOT DISCOUNTED 50¢/CWT.

WEIGHT: 190 TO 200 LBS. AND 230 TO 240 LBS, ARE DELIVERABLE WITH 50¢/CWT. DISCOUNT ON THOSE HOGS. NO HOGS UNDER 190 OR OVER 240 WILL BE ACCEPTED

DELIVERY TIME: ON MONDAY, TUESDAY, WEDNESDAY, AND THURSDAY, FOLLOWING THE 6TH DAY OF THE CONTRACT MONTH, EXCEPT THAT DELIVERIES SHALL NOT BE PERMITTED ON A HOLIDAY. CONTRACT TRADING CLOSES ON THE 20TH CALENDAR DAY OF THE CONTRACT MONTH OR THE BUSINESS DAY PRIOR THERETO.

DELIVERY COSTS: SELLER PAYS ALL DELIVERY COSTS, WEIGHING, FEEDING, GRADING, COMMISSION AND YARDAGE.

CONTRACT MONTHS: FEBRUARY, APRIL, JUNE, JULY, AUGUST, OCTOBER, DECEMBER

MAXIMUM PRICE CHANGE: ANY ONE DAY $1.50/CWT. FROM PREVIOUS DAY'S CLOSE

PRICE QUOTATIONS AND MINIMUN FLUCTUATIONS: QUOTED IN CENTS PER POUND, WITH $.025 PER CWT. (7.50 PER ROUND LOT) AS THE MINIMUN CHANGE

Feeder Cattle Futures

(CHICAGO MERCANTILE EXCHANGE)

TRADING UNIT: 42,000 LBS. (5% VARIATION)

MARGIN REQUIREMENTS: VARIABLE FROM TIME TO TIME, DEPENDING ON THE LEVEL AND VOLATILITY OF PRICES

COMMISSION: ROUND TURN $45

DELIVERY POINTS: PAR - SIOUX CITY, IOWA AND OMAHA, NEBRASKA
50¢/CWT. DISCOUNT - ST. PAUL, MINNESOTA
- KANSAS CITY, MISSOURI
- ST. JOSEPH, MISSOURI
- DODGE CITY, KANSAS
- WICHITA, KANSAS
- GREELEY, COLORADO
- OKLAHOMA CITY, OKLAHOMA
- AMARILLO, TEXAS
75¢/CWT. DISCOUNT - BILLINGS, MONTANA

PAR DELIVERY: (A) 80% CHOICE AND 20% GOOD STEERS AVERAGING BETWEEN 550 AND 650 POUNDS
(B) NO UNIT WILL BE ACCEPTED FOR DELIVERY IF IT CONTAINS ANY ANIMALS WEIGHING IN EXCESS OF 50 POUNDS MORE OR 50 POUNDS LESS THAN THE AVERAGE WEIGHT OF THE UNIT.

DISCOUNTS: GRADE: UP TO 10 ADDITIONAL HEAD OF GOOD STEERS CAN BE SUBSTITUTED AT $4.00/CWT. DISCOUNT
WEIGHT: EACH POUND OVER 650 LBS, WILL BE DISCOUNTED $.015 PER CWT.

DELIVERY TIME: ON MONDAY, TUESDAY, WEDNESDAY, AND THURSDAY OF THE CONTRACT MONTH EXCEPT ON HOLIDAYS OR THE DAY PRECEDING A HOLIDAY. TRADING TERMINATES ON THE 20TH CALENDAR DAY OF THE MONTH.

DELIVERY COSTS: PAID BY SELLER OF DELIVERER

CONTRACT MONTHS: MARCH, APRIL, MAY AUGUST, SEPTEMBER, OCTOBER, NOVEMBER

MAXIMUN PRICE CHANGE: IN ANY ONE DAY $1.50/CWT. FROM PREVIOUS DAY'S CLOSE.

PRICE QUOTATIONS AND MINIMUM FLUCTUATIONS: QUOTED IN CENTS WITH $0.25 PER CWT. ($10.50 PER ROUND LOT) AS THE MINIMUM CHANGE.

Live Cattle Futures

(CHICAGO MERCANTILE EXCHANGE)

TRADING UNIT: 40,000 LBS. (5% VARIATION PERMITTED)

MARGIN REQUIREMENTS: VARIABLE FROM TIME TO TIME, DEPENDING ON THE LEVEL AND VOLATILITY OF PRICES.

COMMISSION: ROUND TURN $45

DELIVERY POINTS: PAR - OMAHA, NEBRASKA; SIOUX CITY, IOWA; JOLIET AND PEORIA, ILLINOIS
75¢/CWT. DISCOUNT - GUYMON, OKLAHOMA

PAR DELIVERY: USDA YEILD GRADE 1,2,3, OR 4 CHOICE STEERS (40,000 LBS.)
(A) 1050 - 1125.5 LBS, DRESSING YEILD 62%
(B) 1125.5 - 1200 LBS. DRESSING YIELD 63%
(C) INDIVIDUAL STEERS SHALL WEIGH NOT MORE THAN 100 POUNDS OVER OR UNDER AVERAGE FOR LOT

DISCOUNTS: YIELD: 50¢/CWT. EACH ½% LOWER YIELD
YIELD GRADE: MAXIMUM 8 HEAD YIELD GRADE NO. 4'S AT PAR; 9-18 HEAD $3/CWT. DISCOUNT; AND YIELD GRADE NO. 5'S NOT DELIVERABLE
WEIGHT: $3.00/CWT. EACH STEER 100 - 200 LBS OVER OR UNDER WEIGHT. (AVERAGE WEIGHT OF LOT USED TO COMPUTE)
NOT ACCEPTABLE 200 LBS UNDER OR OVER AVERAGE, AND NO INDIVIDUAL LESS THAN 950 OR MORE THAN 1300 POUNDS
QUALITY: $3.00/CWT. FOR UP TO 8 HEAD USDA GOOD STEERS

DELIVERY TIME: ON MONDAY, TUESDAY, WEDNESDAY AND THURSDAY FOLLOWING 6TH DAY OF CONTRACT MONTH, EXCEPT THAT DELIVERIES MAY NOT BE MADE ON HOLIDAY OR THE DAY PRECEDING A HOLIDAY. FUTURES TRADING TERMINATES ON THE 20TH CALENDAR MONTH OR THE LAST BUSINESS DAY PRIOR THERETO. DELIVERY OF OPEN CONTRACTS MANDATORY AFTER TRADING CLOSES.

DELIVERY COST: SELLER PAY ALL DELIVERY COSTS INCLUDING WEIGHING, GRADING, FEED, COMMISSION, YARDAGE.

CONTRACT MONTHS: FEBRUARY, APRIL, JUNE, AUGUST, OCTOBER, DECEMBER

MAXIMUM PRICE CHANGE: IN ANY ONE DAY $1.50/CWT. FROM PREVIOUS DAY'S CLOSE.

PRICE QUOTATIONS AND MINIMUM FLUCTUATIONS: QUOTED IN DOLLARS AND CENTS WITH $.025 PER CWT. ($10 PER ROUND LOT) AS THE MINIMUM CHANGE

Soybean Futures Contract

(CHICAGO BOARD OF TRADE)

TRADING UNIT: 5,000 BUSHELS

MARGIN REQUIREMENTS: VOLATILE FROM TIME TO TIME, DEPENDING ON THE LEVEL AND VOLATILITY OF PRICES. INITIAL MARGIN IS A FLAT SUM WHICH GENERALLY APPROXIMATES 10% OF CONTRACT PRICE

COMMISSION: ROUND TURN $35

DELIVERY POINT: EXCHANGE-APPROVED GRAIN ELEVATORS IN CHICAGO RAIL SWITCHING DISTRICT. DELIVERY MAY ALSO BE MADE IN TOLEDO OR ST. LOUIS AT DISCOUNTS OF 5 AND 7 CENTS PER BUSHEL, RESPECTIVELY, UNDER (CHICAGO) CONTRACT PRICE.

PAR DELIVERY: No. 2 YELLOW SOYBEANS

DISCOUNTS AND PREMIUMS: No 1 YELLOW SOYBEANS - 3¢ PREMIUM
No. 3 YELLOW SOYBEANS - 3¢ DISCOUNT (14% OR LESS MOISTURE)

DELIVERY TIME: SELLER MAY DELIVER ON ANY BUSINESS DAY OF THE CONTRACT MONTH, BUT IF NOT PREVIOUSLY DELIVERED, DELIVERY MUST BE MADE ON THE LAST BUSINESS DAY OF THE MONTH.

DELIVERY COST: PAID BY DELIVERER.

CONTRACT MONTHS: NOVEMBER, JANUARY, MARCH, MAY, JULY, AUGUST, SEPTEMBER

MAXIMUN PRICE CHANGE: IN ANY ONE DAY, 20¢ PER BUSHEL FROM PREVIOUS DAY'S CLOSE

PRICE QUOTATIONS AND MINIMUM FLUCTUATIONS: QUOTED IN CENTS AND FOURTHS OF A CENT PER BUSHEL, WITH ¼¢ PER BUSHEL ($12.50 PER ROUND LOT) AS THE MINIMUM CHANGE.

Wheat Futures Contract

(KANSAS CITY BOARD OF TRADE)

TRADING UNIT: 5,000 BUSHELS

MARGIN REQUIREMENTS: VARIABLE FROM TIME TO TIME, DEPENDING ON THE LEVEL AND VOLATILITY OF PRICES. INITIAL MARGIN IS A FLAT SUM WHICH GENERALLY APPROXIMATES 10% OF CONTRACT PRICE.

COMMISSION: CONSULT BROKER (ABOUT $30)

DELIVERY POINT*: EXCHANGE-APPROVED GRAIN ELEVATORS IN KANSAS CITY RAIL SWITCHING DISTRICT.

PAR DELIVERY: NO. 2 HARD WINTER WHEAT

DISCONTS OR PREMIUMS: NO. 1 HARD WINTER WHEAT - 1 1/2¢ PREMIUM
NO. 3 HARD WINTER WHEAT - 1 1/2¢ DISCOUNT

DELIVERY TIME: SELLER MAY DELIVER ON ANY BUSINESS DAY OF THE CONTRACT MONTH, BUT IF NOT PREVIOUSLY DELIVERED, DELIVERY MUST BE MADE ON THE LAST BUSINESS DAY OF THE MONTH.

DELIVERY COSTS: PAID BY DELIVERER

CONTRACT MONTHS: DECEMBER, MARCH, MAY, JULY, SEPTEMBER

MAXIMUM PRICE CHANGE: IN ANY ONE DAY, 25¢ PER BUSHEL FROM PREVIOUS DAY'S CLOSE.

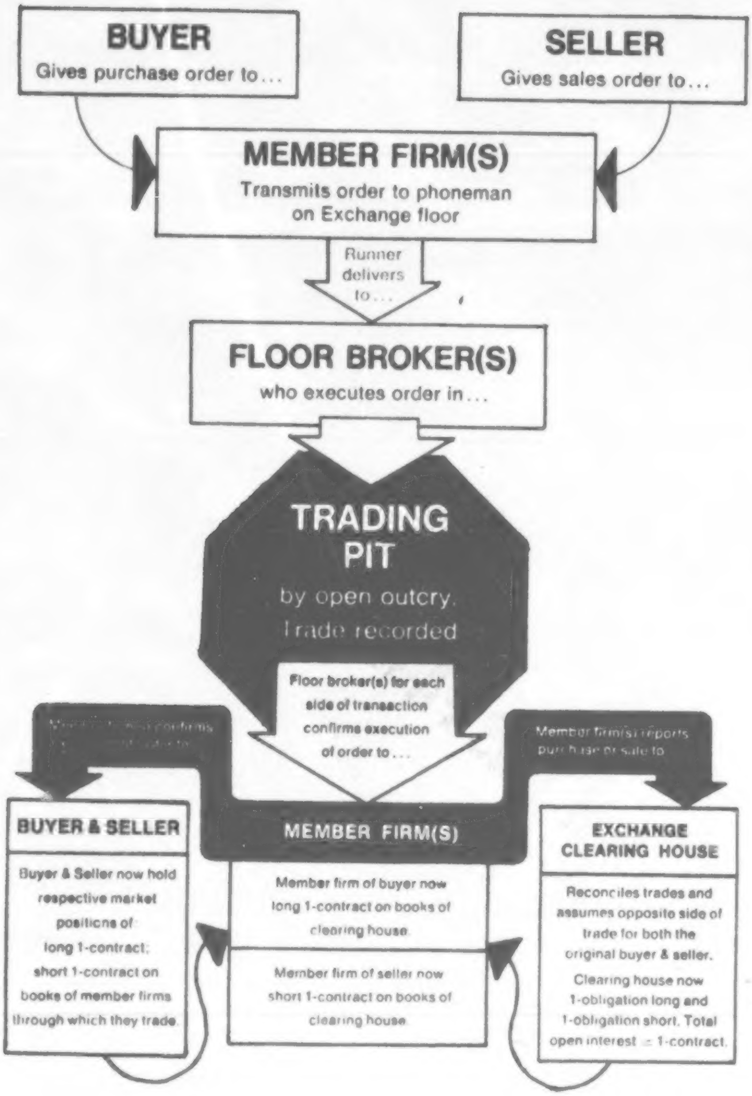
PRICE QUOTATIONS AND MINIMUM FLUCTUATIONS: QUOTED IN CENTS AND FOURTH OF A CENT PER BUSHEL, WITH 1/4¢ PER BUSHEL ($12.50 PER ROUND LOT) AS THE MINIMUM CHANGE.

*NOTE: ON APRIL 1, 1974, THE KANSAS CITY BOARD OF TRADE BEGAN TRADING IN A NEW GULF HARD RED WINTER WHEAT FUTURES CONTRACT. THE CONTRACT IS THE SAME AS THE "OLD" CONTRACT OUTLINED ABOVE WITH TWO EXCEPTIONS:

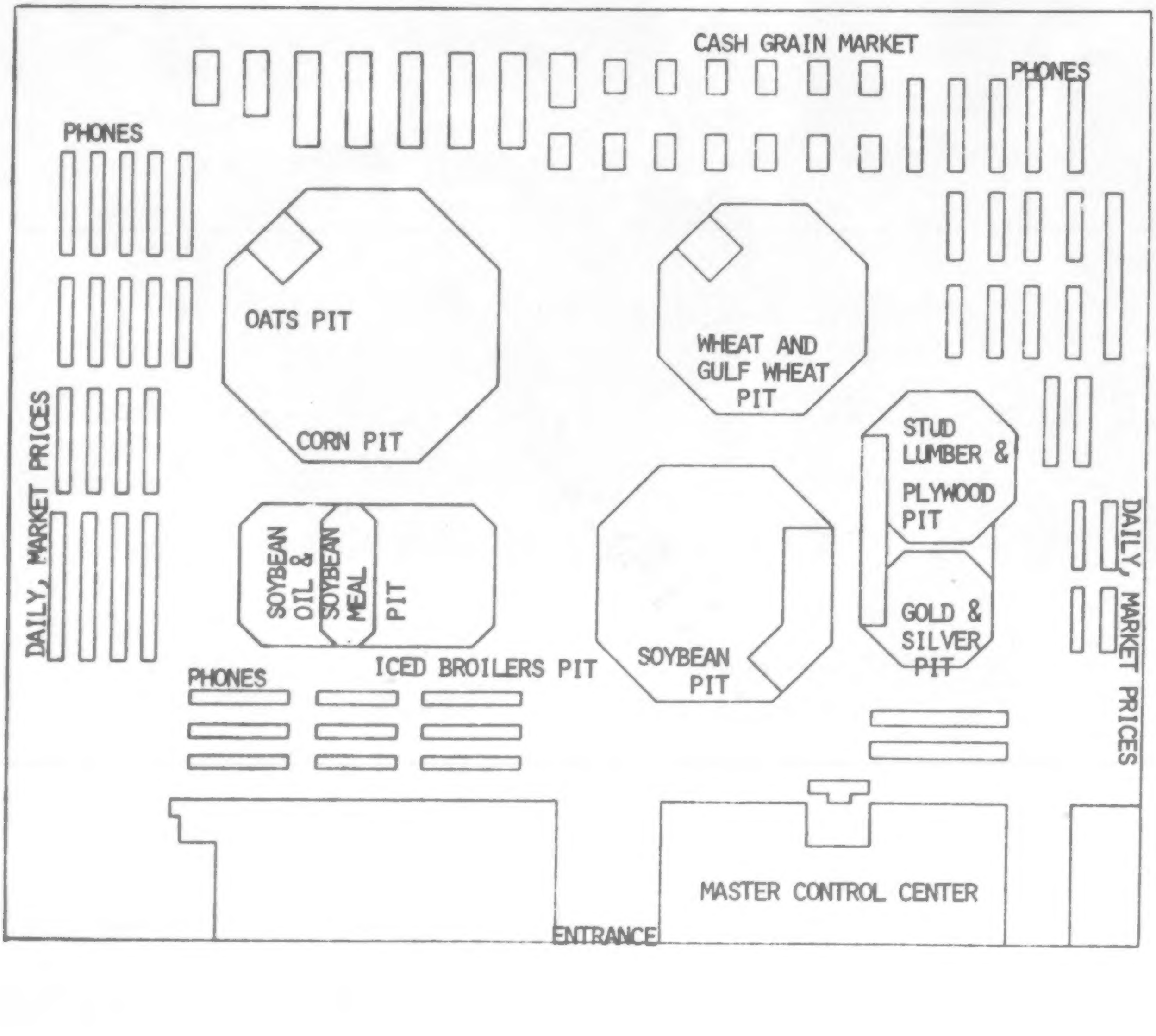
1) THE CONTRACT IS TRADED ON THE BASIS OF THE PRICE ON TRACK IN HOUSTON-GALVESTON. THOSE MAKING DELIVERY WILL HAVE THE OBLIGATION TO PAY FREIGHT TO THE GULF. SHOULD THE DELIVERY WHEAT BE ORDERED TO ANOTHER DESTINATION, THE FREIGHT WILL BE ADJUSTED ACCORDINGLY.

2) THERE WILL BE 10 DELIVERY POINTS FOR THE CONTRACT INCLUDING KANSAS CITY AND ST. JOSEPH, MISSOURI; WICHITA, HUTCHINSON AND SALINA, KANSAS; ENID, OKLAHOMA; FORT WORTH, TEXAS; AND OMAHA, HASTINGS AND LINCOLN, NEBRASKA.

Order Execution Process


BUYER
Gives purchase order to...
SELLER
Gives sales order to...
MEMBER FIRM(S)
Transmits order to phoneman on Exchange floor
Runner delivers to...
FLOOR BROKER(S)
who executes order in...
TRADING PIT
by open outcry.
Trade recorded
Floor broker(s) for each side of transaction confirms execution of order to...
[illegible] confirms
[illegible] to
Member firm(s) reports purchase or sale to
BUYER & SELLER
Buyer & Seller now hold respective market positions of long 1-contract; short 1-contract on books of member firms through which they trade.
MEMBER FIRM(S)
Member firm of buyer now long 1-contract on books of clearing house.
Member firm of seller now short 1-contract on books of clearing house.
EXCHANGE CLEARING HOUSE
Reconciles trades and assumes opposite side of trade for both the original buyer & seller.
Clearing house now 1-obligation long and 1-obligation short. Total open interest = 1-contract.

Trading Floor



Roles of Hedgers and Speculators

HEDGER

"Locks-In" Acceptable Profit Margin

Avoids Risk Of Price Declines

Foregoes Opportunity Of Price Advance

SPECULATOR

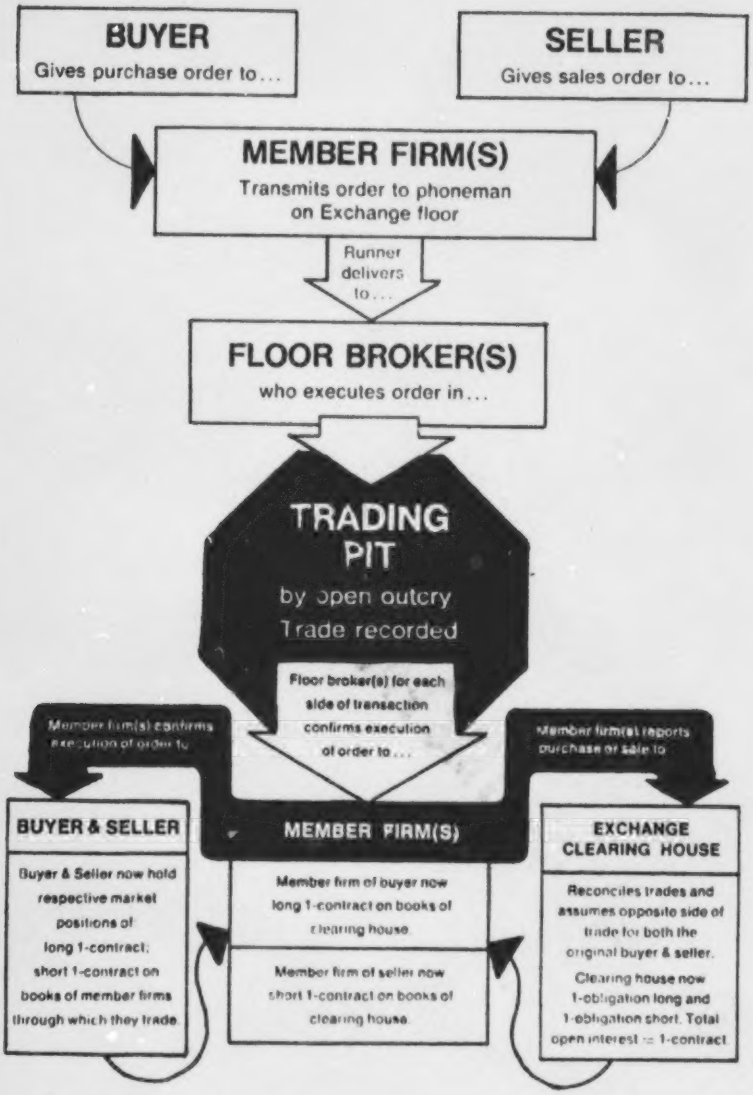
Assumers The Hedger's Risk

Seeks Profit From Price Fluctuations

Hedging Checklist

1. KNOW YOUR COSTS.
2. ESTIMATE FUTURE CASH MARKET PRICE MOVES - FOR OR AGAINST YOU, AND BY HOW MUCH.
3. KNOW THE C.M.E. CONTRACT SPECIFICATIONS.
4. KNOW YOUR COST-OF-DELIVERY BASIS.
5. KNOW YOUR HISTORICAL BASIS.
6. LOCK IN YOUR FEED COSTS BY FORWARD CONTRACTING OR HEDGING.
7. USE A KNOWLEDGEABLE BANKER WHO IS WILLING TO MEET ALL YOUR MARGIN CALLS.
8. USE A GOOD COMMODITY FUTURES BROKER WHO CAN HELP YOU WITH YOUR BASIS, WITH FUNDAMENTALS, PRICES, AND SOUND ADVICE.
9. DEVELOP YOUR HEDGING PLAN IN ADVANCE, WITH YOUR BROKER AND YOUR BANKER, TO AVOID HAVING TO MAKE EMOTIONAL DECISIONS LATER UNDER PRESSURE.
10. DON'T PLAN TO HEDGE YOUR ENTIRE DELIVERABLE HERD AT ONE TIME EXCEPT WHEN WIND-FALL PROFITS MAY BE LOCKED IN.
11. REMEBER, YOUR POSITION IN FUTURES MUST BE OPPOSITE YOUR POSITION IN THE CASH MARKET. OTHERWISE YOU WILL BE SPECULATING IN BOTH MARKETS.
12. WHEN YOU SELL YOUR LIVESTOCK, LIFT (OFFSET) YOUR HEDGE.
13. KEEP IN MIND THAT IT IS EASIER TO PREDICT BASIS CHANGES THAN PRICE MOVEMENTS.
14. BEAR IN MIND THAT YOUR HEDGE IS AN INSURANCE POLICY TO BE CASHED WHEN YOUR LIVESTOCK ARE SOLD. YOUR BROKER CAN ADVISE YOU IF A (RARE) OPPORTUNITY EXISTS TO PROFIT BY MAKING DELIVERY.

Order Execution Process


BUYER
Gives purchase order to...
SELLER
Gives sales order to...
MEMBER FIRM(S)
Transmits order to phoneman on Exchange floor
Runner delivers to...
FLOOR BROKER(S)
who executes order in...
TRADING PIT
by open outcry
Trade recorded
Floor broker(s) for each side of transaction confirms execution of order to...
Member firm(s) confirms execution of order to
Member firm(s) reports purchase or sale to
BUYER & SELLER
Buyer & Seller now hold respective market positions of long 1-contract; short 1-contract on books of member firms through which they trade.
MEMBER FIRM(S)
Member firm of buyer now long 1-contract on books of clearing house.
Member firm of seller now short 1-contract on books of clearing house.
EXCHANGE CLEARING HOUSE
Reconciles trades and assumes opposite side of trade for both the original buyer & seller.
Clearing house now 1-obligation long and 1-obligation short. Total open interest = 1-contract.

Futures Prices

Friday, June 11, 1976

—GRAINS AND FEEDS—

WHEAT (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	378	380½	366	371-370	−10to11	464½	334½
Sept	388	389	375	379½-380	−11to10½	428	347
Dec	401	401	389	391-392	−10½to9½	423	354½
Mar 77	409½	411½	398½	403	−9½	431½	365

Sales Thurs. 10,952 contracts

WHEAT (K.C.)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	391	391	378	380½-380	−9½to10	438	342½
Sept	395	395	385	387½-387	−9to9½	420	350½
Dec	406	406½	396	397 396	−10½to11½	411½	364
Mar 77	414	414	403½	406	−11	420½	373½
May	416½	418	410	410	−11	421	403

Sales Thurs. 4,178 contracts.

WHEAT (MPLS)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	420	420	410	412½ 411	−7½to9	442	369
Sept	419	419½	410	412 412½	−8to7½	438	372
Dec	433	426	418½	419½	−8¾	440	380
Mar 77	436	436	426	426	−11	439	401

Sales Thurs. 1,162 contracts.

CORN (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	308½	308½	302	303 304¼	−6to4¾	349	248
Sept	300	300	291½	294½-295	−5¾to5¼	305½	260
Dec	288	289	282½	284-285	−5¾to4¾	297	254½
Mar 77	297½	297½	290	291	−6½	303	262½
May	298	299½	295	295	−6¾	306	269¾

Sales Thurs 37,902 contracts

SOYBEANS (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	642	667	642	663-664	+15½to16½	683	466
Aug	643	670	646	664-664½	+12¾to13¼	681	469½
Sept	652	682	651	670-669	+15¾to14¾	682	475
Nov	662	679	650	673-675	+11¾to13¾	679	483
Jan 77	662	683	656	677-679	+10½to12½	683	490
Mar	666	687	667	681-682	+7½to8½	687	504½
May	667	690	667	683½	+5¼	690	511½
July	676	694	674	685-687	+3to5	694	619½

Sales Thurs 22,719 contracts

SOYBEAN MEAL (CBT)—100 tons; $ per ton

	Open	High	Low	Close	Change	Season's High	Season's Low
July	200.00	207.50	198.00	205.5 206.5	+4.0to5.0	207.50	127.00
Aug	197.50	207.00	197.50	205.00	+4.30	207.00	129.00
Sept	198.00	206.00	197.00	203.50-204	+1.8to4.3	206.00	131.00
Oct	195.00	205.00	195.00	201.50	+3.10	205.00	133.50
Dec	193.00	203.00	193.00	201.-200.50	+3.5to3.0	203.00	137.00
Jan77	193.00	203.50	193.00	200.00	+2.30	203.50	139.70
Mar	193.00	202.70	193.00	199.-198.50	+2.0to1.5	202.70	142.00
May	195.00	202.00	195.00	198.-199.50	+1.5to3.0	202.00	143.50
July	202.00	202.00	202.00	199.00b		202.00	202.00

Sales Thurs. 12,260 contracts

SOYBEAN OIL (CBT)—60,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	18.70	18.91	18.40	18.43-.45	−.40to.38	26.65	15.27
Aug	18.75	19.10	18.52	18.60-.65	−.38to.43	26.00	15.33
Sept	18.70	19.25	18.55	18.75-.70	−.38to.43	21.90	15.55
Oct	19.00	19.35	18.75	18.85-.90	−.50to.45	20.70	15.65
Dec	19.40	19.75	19.15	19.23-.20	−.40to.43	19.75	15.80
Jan 77	19.45	19.80	19.25	19.30	−.40	19.83	16.31
Mar	19.50	19.90	19.40	19.40	−.40	19.95	16.48
May	19.70	20.00	19.52	19.55	−.33	20.05	16.60
July	19.95	20.05	19.70	19.75	−.30	20.15	18.30

Sales Thurs. 10,570 contracts.

OATS (CBT)—5,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	199	199	194	196½	−1½	200	134½
Sept	191	191	188½	189¾-½	−1to¾	192	135
Dec	190½	190½	185¼	188½	−1	191	146
Mar 77	187½	189	184	188	−¾	189½	133

Sales Thurs. 771 contracts.

OATS (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	167	167	163½	165	−2¾	169	148¾
Oct	167¼	167¼	163¼	163¼	−5½	169¾	146
Dec	167½	167½	163½	163½a	−4½	169¼	157½

Est. sales 525, sales Thurs.: 708 contracts.

RAPESEED (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	594½	600	592¾	599b	+7	665	466½
Sept	595½	602¾	597	600b	+5½	602¾	458
Nov	594	600½	591	598-598½	+5to5½	600½	485
Jan 77	596	601	593	597b	+4	601	491½

Est. sales 1,280, sales Thurs.: 2,440 contracts.

RYE (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	284¼	286½	281¼	282½b	−7	289	231
Oct	286	286½	281	281½b	−5¼	289	231
Dec	284	284	278¼	278½a	−6½	289	249

Est. sales 640, sales Thurs. 730 contracts.

BARLEY (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	232	232	229½	229½	−2½	243¼	220
Oct	230½	230½	228	228½a	−2¼	232	217½
Dec	228½	229	227	227a	−3	230½	217¾

Est. sales 630, sales Thurs.: 1,838 contracts.

FLAXSEED (WPG)—1,000 bu.; cents per bu.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	734	737	725	730	−4	739	633½
Oct	739	744¾	734	737b	−6	745½	626
Nov	743	745	734	737a	−6	745	648
Dec	743	743	734	736b	−5	743	638¼

Est. sales 340, sales Thurs.: 514 contracts.

—LIVESTOCK AND MEAT—

CATTLE (CME)—40,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	42.20	42.20	41.17	41.55-.40	−1.02to1.17	49.80	40.00
Aug	46.25	46.25	45.65	46.12-.20	−.25to.17	48.62	42.02
Oct	46.85	47.25	46.70	47.15-.25	+.20to.30	47.60	42.60
Dec	47.42	47.62	47.27	47.55-.62	+.15to.22	47.62	43.10
Feb 77	47.30	47.40	47.05	47.25	+.03	47.40	43.40
Apr	47.10	47.30	46.90	47.00	....	47.10	44.17
June	47.75	47.90	47.75	47.90	+.20	47.90	47.00

Est. sales 9,558, sales Thurs. 18,282 contracts

HOGS (CME)—30,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	51.85	52.62	51.65	52.45-.62	+.60to.77	56.00	41.00
July	51.75	52.75	51.37	52.75-.60	+1.13to.98	56.15	40.90
Aug	48.15	48.97	47.70	48.85-.97	+.80to.92	53.80	38.50
Oct	45.05	45.90	44.75	45.80-.90	+.80to.90	50.90	36.40
Dec	44.50	44.75	43.90	44.60-.75	+.30to.45	44.75	37.50
Feb 77	44.00	44.25	43.70	44.25	+.30	44.25	39.00
Apr	42.10	42.65	42.00	42.50-.65	+.45to.60	42.65	38.00
June	43.65	43.80	43.60	43.80b	+.75	43.80	39.70
July	43.65	43.95	43.65	43.85	+.15	43.95	39.30

Sales 4,331, sales Thurs 4,215 contracts.

PORK BELLIES (CME)—36,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	79.25	80.60	79.00	80.55-.60	+1.95to2.00	94.95	64.50
Aug	76.50	77.90	76.15	77.90-.70	+1.80to1.60	92.45	62.25
Feb 77	68.70	69.85	68.40	69.80-.85	+1.93to1.98	69.85	56.90
Mar	68.70	69.65	68.25	69.50-.65	+1.80to1.95	69.65	56.85
May	68.50	69.75	68.45	69.70	+1.95	69.75	59.75

Est. sales 6,632, sales Thurs. 6,568 contracts.

ICED BROILERS (CBT)—28,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	42.50	42.50	41.75	42.25	−.15	43.70	28.45
July	42.90	43.00	42.85	42.90	+.10	43.80	28.50
Aug	43.00	43.05	42.95	42.97	+.12	43.40	30.00
Sept	41.45	41.90	41.40	42.00	+.50	42.10	37.75
Nov	39.70	40.15	39.70	40.10-.15	+.45to.50	40.15	36.90
Jan 77	41.10	41.40	41.10	41.30	+.40	41.40	38.50

Sales Thurs.: 1,034 contracts.

—FOODS—

FRESH EGGS (CME)—22,500 doz.; cents per doz.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	56.35	56.50	56.05	56.15	+.25	56.50	42.85
July	56.00	56.10	55.00	55.00-.40	−.40to unch	56.10	47.90
Aug	55.50	55.70	55.50	55.50	...	55.70	50.25
Sept	58.80	58.85	58.05	58.05	−.80	59.00	58.25
Nov	59.25	59.65	59.25	59.35	−.55	59.90	50.20
Dec	61.50	61.85	61.20	61.30-.20	−.25to.35	62.00	54.00

Est. sales 254, sales Thurs 339 contracts

MAINE POTATOES (NYM)—50,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
Nov	5.38	5.40	5.23	5.30	−.07	6.56	5.08
Mar 77	6.50	6.50	6.31	6.35	−.09	7.30	5.85
Apr	7.05	7.05	6.91	6.95	−.10	7.75	6.60
May	8.25	8.25	8.02	8.05	−.30	8.90	7.55

Est sales 324; sales Thurs. 440 contracts

IDAHO POTATOES (CME)—80,000 lbs.; cents per lb.

No sales.

SUGAR, WORLD (CSE)—112,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	12.70	12.95	12.65	12.80-.86	+.16to.22	25.10	11.05
Sept	13.25	13.45	13.25	13.30-.35	+.16to.21	19.08	11.05
Oct	13.50	13.67	13.47	13.56-.59	+.17to.20	18.95	11.00
Mar 77	13.71	13.85	13.71	13.75-.73	+.13to.11	15.57	12.82
May	13.80	13.86	13.76	13.75n	+.09	15.53	12.79
July	13.77	13.90	13.77	13.82-.79	+.11to.08	15.62	13.30
Sept	13.75	13.90	13.75	13.80	+.07	15.35	13.27
Oct	13.78	13.90	13.78	13.80-.78	+.05to.03	15.15	13.20

Est sales 6,600; sales Thurs 4,696 contracts.
Spot 12.85n

COPPER (CSE)—37,500 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	151.10	151.10	151.10	151.10b	+3.00	151.10	55.60
Sept	151.30	151.30	151.30	151.30b	+3.00	151.30	77.00
Dec	146.65	146.65	146.65	146.65b	+3.00	146.65	82.10
Mar77	142.00	142.00	141.80	142.00b	+3.00	142.00	94.86
May	141.00	141.00	140.70	141.00b	+3.00	141.00	121.50

Est sales 422, sales Thurs 745 contracts.

COCOA (CEX)—30,000 lbs.; cents per lb.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
July	97.30	97.30	96.70	97.25	−.65	99.00	41.65
Sept	92.50	92.50	91.20	92.00	−.70	94.05	43.36
Dec	82.30	82.91	81.70	82.75	−.15	84.10	45.20
Mar 77	77.20	77.90	77.00	77.85	+.05	78.95	48.50
May	74.65	74.65	74.00	74.60	+.05	75.50	52.45
July	71.25	71.65	71.00	71.50	+.05	71.65	58.10
Sept	69.00	69.40	68.60	69.20	+.05	69.40	57.10

Est. sales 165, sales Thurs. 2,367 contracts

ORANGE JUICE (CTN)—15,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	56.55	56.65	54.75	55.10	−1.55	68.50	54.75
Sept	56.90	56.90	54.60	55.35	−1.65	69.50	54.60
Nov	57.50	57.50	55.50	56.00	−1.75	69.20	55.50
Jan 77	58.50	58.50	56.50	57.00	−1.45	70.25	56.50
Mar	59.50	59.50	58.00	58.20b	−1.20	69.90	58.00
May	60.30	60.40	59.30	59.20b	−1.30	69.75	59.30

Est. sales 600, sales Thurs.: 140 contracts.

—METALS—

COPPER (CMX)—25,000 lbs.; cents per lb.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
June	70.80	70.90	70.80	71.30	+1.30	75.20	62.80
July	71.30	71.80	70.90	71.70	+1.40	75.60	55.20
Sept	72.30	72.70	72.00	72.70	+1.40	76.60	56.30
Dec	74.30	74.60	73.70	74.40	+1.30	77.60	57.60
Jan 77	74.80	74.80	74.20	74.80	+1.20	77.80	58.70
Mar	75.50	75.70	75.10	75.60	+1.20	78.30	59.90
May	76.30	76.60	76.00	76.40	+1.20	78.70	66.20
July	77.20	77.20	76.90	77.20	+1.20	77.20	73.00

Est. sales 9,050, sales Thurs.: 7,273 contracts

SILVER (CMX)—5,000 troy oz.; cents per troy oz.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
July	494.00	496.50	488.00	496.00	+4.00	575.00	390.00
Sept	497.00	500.00	491.50	499.60	+3.50	583.00	396.00
Dec	505.00	507.50	498.50	507.10	+3.30	591.30	404.30
Jan77	507.50	509.00	503.00	509.60	+3.70	539.50	408.00
Mar	512.50	516.00	507.00	514.70	+3.10	514.50	412.00
May	518.00	521.00	513.00	520.10	+3.10	520.00	419.30
July	523.00	523.00	519.00	525.60	+3.10	525.00	442.00
Sept	528.50	528.50	525.30	531.20	+3.10	531.00	455.40

Est. sales 13,990, sales Thurs 27,554 contracts.

SILVER (CBT)—5,000 troy oz.; cents per troy oz.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	494.00	499.00	490.00	499.0-498.5	+4.5to4.0	572.00	386.50
July	497.50	499.00	497.50	499.00	+3.30	499.00	439.00
Aug	498.50	500.00	498.60	499.00-500.	+3.5to4.5	580.00	392.50
Oct	499.00	503.00	493.80	502.80-.50	+3.8to3.5	588.00	396.50
Dec	503.50	508.00	498.00	507.00-.50	+2.8to3.3	596.00	404.00
Feb77	508.50	513.00	505.00	512-511.50	+3.0to2.5	513.00	409.50
Apr	514.00	517.50	510.00	517.00-.50	+2.3to2.8	518.50	415.00
June	520.00	522.00	515.50	522.00	+2.00	527.00	421.00
Aug	524.50	527.00	522.00	527.00	+1.50	527.00	446.00
Oct	529.20	532.50	528.50	532.50	+1.50	532.50	476.50

Sales Thurs 10,032 contracts.

SILVER COINS (NYM)—10 $1000 bags; $ per bag

	Open	High	Low	Close	Change	Season's High	Season's Low
July	3465	3465	3435	3470b	+5	3960	2745
Oct	3493	3500	3488	3518b	+3	4010	2810
Apr 77	3600	3645	3595	3678a	+8	3645	2915
July	3650	3695	3650	3688a	+8	3695	3050

Est sales 175, sales Thurs. 279 contracts

PLATINUM (NYM)—50 troy oz.; $ per troy oz

	Open	High	Low	Close	Change	Season's High	Season's Low
July	172.00	172.40	168.00	171.70		193.70	136.30
Oct	175.80	176.50	172.30	175.10	+.10	196.00	138.60
Jan77	180.00	180.30	177.00	178.90a	+.10	198.50	141.00
Apr	183.00	183.00	180.50	182.30a		183.00	145.00
July	187.10	187.10	184.50	185.50b		[illegible]	148.00
Oct	190.10	190.10	190.10	188.90a	+.10	190.10	170.70

Est. sales 942, sales Thurs. 864 contracts.

GOLD (CMX)—100 troy oz.; $ per troy oz.-s

	Open	High	Low	Close	Change	Season's High	Season's Low
June	126.30	126.30	125.40	125.80	−.90	204.80	123.00
July	126.60	126.60	126.60	126.30	−1.00	129.60	126.40
Aug	127.50	127.50	126.50	126.90	−.90	191.00	125.00
Oct	129.30	129.00	128.00	128.40	−1.10	193.00	126.10
Dec	130.70	130.70	126.70	130.00	−1.00	185.70	126.70
Feb77	132.50	132.50	131.20	131.60	−1.10	162.00	128.00
Apr	133.50	133.50	133.20	133.20	−1.10	150.50	129.90
June	135.90	136.00	135.00	134.80	−1.10	141.50	131.30
Aug	136.50	137.00	136.50	136.40	−1.10	140.80	132.90

Est. sales 1,711, sales Thurs. 4,963 contracts.

GOLD (IMM)—100 troy oz.; $ per troy oz.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	126.50	126.50	125.60	126.70	−.40	227.00	123.90
Sept	128.50	128.50	127.70	127.60-.70	−1.2to1.1	195.00	125.00
Dec	130.70	130.70	129.50	130.2-129.8	−.90to1.3	193.00	127.00
Mar77	133.20	133.30	132.20	132.50	−1.30	164.00	129.30
June	135.90	135.90	134.90	135.2-134.9	−1.1to1.4	142.15	131.80
Sept	138.50	138.50	137.80	138.10	−1.10	143.00	134.10

Est sales 1,155, sales Thurs 885 contracts

GOLD (WPG)—400 troy oz.; $ per troy oz.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	127.70	127.70	125.80	126.30b	−.85	170.00	124.40
Oct	129.40	129.40	128.00	128.40b	−1.00	187.90	126.30
Jan77	130.80	130.90	130.70	130.70b	−1.20	151.00	127.60
Apr	133.00	133.30	133.00	133.70a	−.90	140.30	130.90
July	135.80	135.80	135.70	135.70b	−.80	140.00	135.30

Est. sales 35, sales Thurs. 82 contracts

—FIBERS—

COTTON (CTN)—50,000 lbs.; cents per lb.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	79.75	79.75	75.75	79.20-.75	+1.45to2	79.75	45.75
Oct	80.11	80.11	76.11	79.20-.80	+1.09to1.69	80.11	47.30
Dec	78.25	78.29	74.79	77.00-.50	+.21to.71	78.29	50.00
Mar 77	77.40	77.85	74.40	75.70-.90	−.70to.50	77.85	56.25
May	77.10	77.10	73.10	74.60b	−.50	77.10	58.90
July	73.50	73.70	71.52	72.02	−1.50	73.70	60.50
Oct	69.00	69.00	67.90	67.90a	−2.00	69.90	63.35

Est. sales 9,500, sales Thurs. 2,704 contracts.

WOOL (CTN)—6,000 lbs.; cents per lb.

No sales. Spot: 180.0n

—WOOD—

LUMBER (CME)—100,000 bd. ft.; $ per 1000 bd. ft.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	150.50	152.30	149.50	152-151.70	+2.4to2.1	183.30	129.20
Sept	158.00	159.60	157.50	159.50-.60	+1.9to2.0	182.00	154.00
Nov	160.40	162.00	159.90	161.90-162.	+2.4to2.5	178.00	154.00
Jan77	164.50	166.50	164.40	166.30	+2.30	179.00	161.80

Est. sales 1,515, sales Thurs. 1,337 contracts

PLYWOOD (CBT)—76,032 sq. ft.; $ per 1000 sq. ft.

	Open	High	Low	Close	Change	Season's High	Season's Low
July	148.50	151.80	148.10	151.80-.50	+4.1to3.8	169.30	125.50
Sept	151.80	154.20	151.00	154.20	+3.50	170.40	127.00
Nov	153.50	155.00	152.50	155.00	+3.00	169.20	127.50
Jan77	154.50	156.50	153.40	156.20-.50	+2.8to3.0	171.00	140.00
Mar	156.00	157.80	154.50	157.80	+2.80	172.50	151.50
May	157.20	160.00	156.00	159.00-160	+3.0to4.0	172.50	152.00
July	157.90	160.50	157.50	160.50b	+3.00	160.50	155.00

Sales Thurs.: 498 contracts.

—FINANCIAL—

MEXICAN PESO (IMM)—1 million pesos; $ per peso

	Open	High	Low	Close	Change	Season's High	Season's Low
June	.08000	.08000	.07979	.07979	−.00021	.08000	.07349
Sept	.07725	.07755	.07725	.07740	+.00010	.07944	.07037
Dec	.07484	.07510	.07450	.07450	+.00008	.07919	.06722
Mar77	.07160	.07222	.07115	.07139	+.00009	.07460	.06140
June	.06737	.06787	.06675	.06675	..	.06936	.05925
Sept	.06500	.06504	.06384	.06399	+.00008	.07056	.05685

Sales Thurs.: 304 contracts.

SWISS FRANC (IMM)—125,000 francs; $ per franc

	Open	High	Low	Close	Change	Season's High	Season's Low
June	.4020	.4030	.4008	.4010	−.0018	.4111	.3710
Sept	.4076	.4088	.4058	.4068	−.0017	.4239	.3765
Dec	.4135	.4135	.4110	.4122	−.0013	.4207	.3967
Mar 77	.4185	.4185	.4160	.4173	−.0011	.4338	.3900

Sales Thurs. 533 contracts.

BRITISH POUND (IMM)—25,000 pounds; $ per pound

	Open	High	Low	Close	Change	Season's High	Season's Low
June	1.7700	1.7710	1.7700	1.7710	+.0010	2.2800	1.7600
Sept	1.7465	1.7465	1.7415	1.7430	−.0020	2.1160	1.6700
Dec	1.7220	1.7225	1.7220	1.7225	−.0005	2.0640	1.6550

Sales Thurs. 60 contracts

CANADIAN DOLLAR (IMM)—100,000 dlrs; $ per dlr.

	Open	High	Low	Close	Change	Season's High	Season's Low
June	1.0226	1.0233	1.0225	1.0232	+.0017	1.0233	.9715
Sept	1.0141	1.0141	1.0141	1.0141	+.0015	1.0152	.9935
Dec	1.0074	1.0095	1.0074	1.0086	+.0012	1.0105	.9790

Sales Thurs. 91 contracts

DEUTSCHEMARK (IMM)—125,000 marks; $ per mark

	Open	High	Low	Close	Change	Season's High	Season's Low
June	.3880	.3887	.3880	.3887	+.0010	.4455	.3835
Sept	.3910	.3910	.3904	.3910	+.0019	.4410	.3860
Dec	.3929	.3929	.3925	.3929	+.0002	.4037	.3895

Sales Thurs. 213 contracts.

JAPANESE YEN (IMM)—12.5 mil. yen, cents per yen

No sales.

GNMA 8% (CBT)—$100,000 prncpl; pts., 32nds of 100%

	Open	High	Low	Close	Net Chg.	Yield Close	Yield Chg
June	96-02	96-07	96-02	96-07	+ 5-32ds	8.483	−.022
Sept	94-29	95-01	94-26	95-01	+ 2-32ds	8.654	−.009
Dec	94-00	94-04	93-31	94-04	+ 1-32ds	8.787	−.004
Mar77	93-10	93-12	93-08	93-12	− 2-32ds	8.898	+.011
June	92-26	92-27	92-23	92-27	.....	8.978	
Sept	92-11	92-11	92-04	92-09	− 3-32ds	9.063	+.010

U.S. TREASURY BILLS (IMM)—$1 mil.; points of 100%

	Open	High	Low	Close	Net Chg.	Yield Close	Yield Chg
June	94.47	94.54	94.47	94.54	+.06	5.46	−.06
Sept	93.67	93.75	93.66	93.75	+.08	6.25	−.08
Dec	92.95	93.04	92.93	93.03	+.08	6.97	−.08
Mar 77	92.38	92.45	92.37	92.45	+.03	7.55	−.03
June	91.86	91.94	91.86	91.92	+.06	8.08	−.06

Est. sales 305, sales Thurs.: 238 contracts.

a-Asked. b-Bid. n-Nominal. s-Settlement price, determined by exchange, is used for close.

(CBT) Chicago Board of Trade; (KC) Kansas City Board of Trade; (MPLS) Minneapolis Grain Exchange; (WPG) Winnipeg Commodity Exchange; (CME) Chicago Mercantile Exchange; (NYM) New York Mercantile Exchange; (CSE) New York Coffee and Sugar Exchange; (CEX) New York Cocoa Exchange; (CTN) New York Cotton Exchange; (CMX) Commodity Exchange Inc. in New York; (IMM) International Monetary Market of CME.

MARKETING

UNIT III

TEST

1. Match the terms on the right with the proper definition

_____a. A sharp price decline

_____b. One where large supplies cause a decline in price

_____c. One who believes prices will advance

_____d. The period at the end of the trading day

_____e. A price offered subject to immediate acceptance for a specified amount of commodity

_____f. Chicago Board of Trade

_____g. A sharp price advance

_____h. A futures market in which the nearby months are selling at premiums to the more distant months

_____i. The calendar month during which a futures contract matures

_____j. The maximum price advance or decline from the previous day's settlement price permitted in one trading session by the rules of the exchange

_____k. An order to buy or sell when the market reaches a specific point

_____l. A person paid a fee or commission for acting as an agent in making contracts or sales

A. CBT

B. Margin Call

C. Bid

D. Delivery Notice

E. Clearing House

F. Corner

G. Price Limit

H. Bear

I. Pyramiding

J. Inverted Market

K. CFTC

L. Close

M. Board Order

N. Offset

O. Delivery Month

P. Bear Market

Q. Open Interest

R. Delivery Points

S. Open Contracts

T. Bull

U. Day Order

TEST

_____m. The difference between the "cash" price at any particular location and the price of a designated futures contract

_____n. One where small supplied and or strong demand cause prices to rise sharply

_____o. The fee charged by a brokerage firm for execution of a transaction

_____p. Commodity Futures Trading Commission

_____q. An agency connected with commidity exchanges which provides the mechanism by which all futures contracts are made, offset, of fulfilled through delivery of the commodity and through which financial settlement is made

_____r. The closing out of a long position

_____s. One who has bought a cash commodity or a commodity futures contract

_____t. The purchasing of futures to offset a previously established short position

_____u. To secure enough control of a commodity so that its price can be manipulated

_____v. The locations designated by commodity exchanges at which a commodity covered by a futures contract may be delivered in fulfillment of the contract

_____w. An order placed that is valid for one day only

_____x. The liquidation of a purchase of futures through the sale of an equal number of contracts of the same delivery month

V. Position Limit

W. Bull Market

X. Break

Y. Open Outcry

Z. Cover

AA. Liquid Market

BB. Scalper

CC. Basis

DD. Stop Order

EE. Long

FF. Limit

GG. Brokerage

HH. Technical Rally

II. Selling Hedge

JJ. Margin

KK. Speculator

LL. Liquidation

MM. Broker

NN. Bulge

OO. Short

PP. Spreads

TEST

_____y. The maximum number of contracts a speculator can hold "open"

_____z. A method of public outcry for making bids and offers

_____aa. The total of unfilled or outstanding futures contracts, on one side of the market

_____bb. Using the profits on previously established positions as margin for adding to that position

_____cc. Price difference between two different contract months, such as March and July corn

_____dd. Selling futures contracts to protect against possible decreased prices of commodities which will be sold in the future

_____ee. A price movement resulting from conditions developing within the future market itself and not dependent on outside supply and demand factors

_____ff. One who attempts to anticipate commodity price changes and makes profits through the sale and/or purchase of commodity future contracts

_____gg. The selling side of an open futures contract

_____hh. Contracts which have been bought or sold without the transaction having been completed by subsequent sale or repurchase, or actual delivery or receipt of commodity

_____ii. A speculator operating on the trading floor who provides market liquidity by buying and selling rapidly with small profits or losses and who holds his position for a short time

TEST

____jj. An amount of money deposited by both buyers and sellers of futures contract to insure performance against the contract

_____kk. A market where selling and buying can be accomplished with ease, due to the presence of a large number of buyers and sellers

____ll. A request to deposit either the original margin at the time of the transaction or to restore the margin account to required levels after a loss in the futures position has occured

____mm. One who believes prices will decline

____nn. The notification of delivery

2. List six of the nine facts about the historical background of futures markets.

   a.

   b.

   c.

   d.

   e.

   f.

3. List the areas of organizational structure of exchanges.

   a.

   b.

   c.

TEST

4. Select from the list below the agricultural commodities that are actively traded. Place an "x" by the correct answers.

____a. Live feeder lambs
____b. Turkeys
____c. Beef cows
____d. Live hogs
____e. Live feeder cattle
____f. Grain sorghum
____g. Barley
____h. Soybeans
____i. Corn
____j. Wheat
____k. Grapes

5. List four common mechanics of the trading floor.

a.

b.

c.

d.

6. Define the five types of futures orders.

a.

b.

c.

d.

e.

7. List five advantages of hedging.

a.

b.

c.

d.

e.

MARKETING

UNIT III

ANSWERS TO TEST

1. a. X
b. P
c. T
d. L
e. C
f. A
g. NN
h. J
i. O
j. FF & G
k. M & DD
l. MM
m. CC
n. W
o. GG
p. K
q. E
r. LL
s. EE
t. Z
u. F
v. R
w. U
x. N
z. V
aa. Q
bb. I
cc. PP
dd. II
ee. HH
ff. KK
gg. OO
hh. S
ii. BB
jj. JJ
kk. AA
ll. B
mm. H
nn. D

ANSWERS TO TEST

2. Discussion should include six of the following:

   a. Active commodity markets, under rules and regulations, existed in China, Egypt, Arabia, and India 12 centuries before the birth of Christ.

   b. Japan's markets in the late 1600's resembled today's markets.

   c. England and other European countries started active trading in the early 1800's.

   d. By 1848, Chicago became the crossroads for buyers and sellers of grain and the Chicago Board of Trade was established. (CBT)

   e. Kansas City Board of Trade opened in 1856, becoming a major grain market.

   f. Chicago Produce Exchange opened in 1874 and in 1898 was changed to the Chicago Butler and Egg Board only to be changed in 1919 to the Chicago Mercantile Exchange. (CME)

   g. First successful futures contract in a live, nonstorable commodity was in 1964 - live cattle.

   h. In 1966 a live hog contract was established.

   i. Feeder cattle contracts were added in 1971.

3. a. Administration

   b. Members

   c. Clearing Members

4. b,d,e,f,h,i,j

5. Discussion should include the following:

   a. Pit - Octagonal structure 3 feet above the floor level with center at floor level. This is where contracts are traded.

   b. Hours - 9:30 a.m. to 1:15 p.m.

   c. Pulpit (Box or booth) - cage-like structure where price changes and transactions are recorded.

   d. Hand Signals of Pit traders

      1. Blackboards show the full cent value
      2. Fingers of hand in horizontal position show fractional prices
      3. Fingers of hand in vertical position show quantity of contracts
      4. Palms of hand facing outward indicate the trader wants to sell Palms inward indicate a buy

ANSWERS TO TEST

6. Five types of future orders

   a. Market order - an order to buy or sell without regard to a specific price

   b. Limit order - an order to buy or sell at a specific price

   c. Open order - an order to buy or sell at a specific price, but the order stands until executed or cancelled

   d. Day order - orders executed on a specific day

   e. Stop order - becomes a market order to buy only if prices rise to a specified point or to sell if prices drop to a specified point

7. Discussion should include the following:

   a. Hedging is risk management

      Example: Farmer buys fire insurance - he is hedging against the risk of his barn being destroyed by fire. A corn producer hedges his crop to protect against the chance of a down cash market.

   b. The hedger always takes a position in the futures market opposite his position in the cash market

   c. Advantages of hedging

      1) Insurance against risk

      2) Producers can obtain better credit from financial institutions when his inventory is hedged

      3) Hedging often reduces operating costs because finances need not be tied up in storing commodities

      4) Price discovery is an important economic function of the futures markets

      5) Higher levels of management are required of a successful hedger

MARKETING

UNIT IV

FUTURES TRADING

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to select a brokerage firm to use in their futures programs, understand the purpose of a broker and know the mechanics of utilizing a brokerage firm. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Discuss in writing what to look for in selecting a broker.
2. List the things that can be expected of a broker.
3. Discuss in writing opening an account.
4. Match margin requirements with types of accounts.
5. Discuss in writing the procedure in operating an account.
6. List the types of margin with their purpose.

MARKETING

UNIT IV

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Customer's Agreement

   TM 2 - Client Qualification Form - Commodities

   TM 3 - Hedge Account
4. Test
5. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. Bernstein, Jake. *Seasonal Chart Study 1953-1976: An Analysis of Seasonal Cash Commodity Price Tendencies.* Winnetka, IL: MBH Commodity Advisors, 1977.
2. Chicago Board of Trade. *Commodity Trading Manual*, revised edition. Chicago: Chicago Board of Trade, 1976.
3. *Commodities and Futures Trading*, 1976. (Corporate Law & Practice Course Handbook Series 1976-77; Vol. 223) New York: Practicing Law Institute, 1976.
4. Commodity Research Bureau. *Commodity Yearbook*. New York: (Annual).
5. *Commodity Yearbook Statistical Abstract Service*. New York: (Published 3 times per year to supplement *Commodity Yearbook*).
6. *Understanding the Commodity Futures Markets*, 1977 edition. New York: Commodity Research Bureau, 1977.
7. Doyle, Thomas L., Jr. *Live Cattle, Live Hogs and Frozen Pork Bellies*. Los Altos, CA: Futures Research Co., 1976.
8. Lawrence, James C. *Your Fortune in Futures: A Guide to Commodity Futures Trading*. New York: St. Martin's Press, 1976.
9. Lindsay, Charles. *Trident, A Trading Strategy*, 2nd ed. Waterloo, IA: Investor Publications, 1977.
10. Oster, Merrill J. *Commodity Futures for Profit*. Cedar Falls, IA: Professional Farmers of America, 1978.
11. Parris, Frank G. and Joseph J. Tedesco. *The Commodity Market--How It Works*, revised and enlarged edition. Ft. Lauderdale, FL: Parris & Company Commodity Service, 1976.
12. Powers, Mark J. *Getting Started in Commodity Futures Trading*, 2nd ed. Cedar Falls, IA: Investor Publications, 1977.
13. Prestbo, John, ed. *The Dow Jones Commodities Handbook: A Guide to Major Futures Markets*. Princeton, NJ: Dow Jones Books, 1977.

INSTRUCTIONAL MATERIALS

References (continued):

Audio-Visual Materials

C.M.E. Films:

1. What It Takes to Speculate--16mm, color, sound. Available on loan from Modern Talking Pictures, 2020 Prudential Plz., Chicago, IL 60601. (312) 337-3252. About 15 minutes.

2. Your Profit in Futures--(Hedger) 16 mm, color, sound. Available on loan from the Farm Film Foundation, 1425 H Street, NW, Washington, D.C. 20005, (202) 628-1321. About 15 minutes.

Slides and Tapes:

1. Hedging Effectively--35 mm slide/script presentation. Modules for cattle, hogs, eggs, lumber, russet Burbank potatoes, and turkeys. Basic presentation with any one module $25.00 Additional modules $5.00 each. From C.M.E.

2. Hedging with Live Beef Futures, produced by Iowa State University, A-es, IA 50010. 35 mm slide/tape presentation.

3. Using Futures Trading in Live Hogs, 35 mm slides, University of Tennessee, Agricultural Extension Service, Knoxville, TN 37901.

4. The Commodity Futures Market, (General Introduction to Futures Markets and Hedging) 35 mm slides, Oregon State University, Department of Agricultural Economics, Corvallis, OR 97331.

Video Tape:

1. "Principles and Application of Hedging," 104 minutes with instruction manual, Agricultural Extension Service, North Carolina State University, Raleigh, NC 27607.

MARKETING

UNIT IV

INFORMATION SHEET

I. Selecting a Broker

   A. Location is normally of little importance

   B. Personalities are important since 95% of all communications will be by telephone

   C. Know what a brokerage firm offers (Example: What types of commodities and accounts)

   D. Know the brokerage firm's financial stability

   E. Characteristics to look for in an individual broker

      1. Honesty and truth

      2. Professional businessman -- keep your relationship on a business basis, not a personal one

      3. Brokers should feel at ease in working with the commodity that you raise

      4. The broker should put your needs first and his commission second

II. What to Expect of a Broker

   A. Complete analysis of your entire operation from both a production and a marketing standpoint

   B. A broker needs to know your capacity of farm storage facilities, your normal marketing channels and your financial position

   C. A broker should supply you with market informaiton

   D. He should be willing to explain the mechanics of the futures market

   E. He should keep you informed on the various types of orders that can be used

   F. Service from your broker should be an important aspect of your marketing program

INFORMATION SHEET

G. What not to expect

   1. Advising a farmer of whether or not to take a margin position is not a broker's job

III. Opening an Account

   A. Fill out account forms

      1. Ten to twenty pages in length

      2. Your financial responsibilities

      3. The brokerage firm's financial responsibilities

      4. Your financial stability

IV. Margin Requirements with Types of Accounts

   A. Speculative - twice as much margin required

   B. Hedging - only 50% as much margin as speculative account

V. Procedures in Operating an Account

   A. Sign hedging statement saying that your only purpose is to hedge in your commodity account

   B. Make credit check - most firms do a thorough financial check into all of the credit sources of a potential client

   C. Deposit money

      1. Most firms require you to deposit $3,000 to $5,000

      2. Some brokerage firms only require you to deposit an amount equal to the minimum margin requirement

   D. Enter an order

      1. Call broker

      2. Broker will call back when order is executed

   E. Margin calls

      1. The purpose of a margin call is to maintain a total equity equal to the margin requirement of the particular commodity

INFORMATION SHEET

2. Most brokerages allow you 3 to 5 days to get the money to them

3. Some brokerages require the money to be deposited before the market opend the next day

4. Wire transfer systems may be utilized for the immediate transfer of funds

5. Once a margin call is made the money must almost always be deposited even though the market may move in your favor

F. Withdraw surplus - use margin surplus rather than savings accounts

G. Deposit treasury bills

1. When a brokerage account exceeds a deposit of 10,000 most firms will allow you to use short-term treasury bills as margin for your position

2. This allows you to earn the interest on the margin money

VI. Types of Margin

A. Initial margin -- the deposit required to open an account

B. Maintenance margin -- the deposit required to keep the total equity equal to the amount predetermined by the brokerage for your particular commodity

SH U4-8

Customer's Agreement

B.C. CHRISTOPHER & CO.
Kansas City, Missouri

CUSTOMER'S AGREEMENT

Dear Sirs:

In respect to all accounts which the Undersigned has, or may have with you or your successors (hereinafter referred to as you) including accounts from time to time closed and then reopened and including any account as guarantor, it is agreed as follows:

Only actual purchases or sales are contemplated, and all orders shall be executed subject in all respects to the regulations and usages of the New York Stock Exchange or other exchange or market where executed; and you and your correspondents are hereby constituted agents of the Undersigned for the purpose of consummating all such transactions, borrowing moneys therefor, in New York or elsewhere, at rates from time to time prevailing, either separately for Undersigned or together with loans for other customers, and you are authorized to make such advances and expend such moneys and whenever necessary to borrow and deliver such securities or property as may be required in respect of all transactions.

All securities or commodities, or contracts for commodities or securities, now held or hereafter purchased from or by you for, or now or hereafter deposited with you, by the Undersigned, are to be held by you, as security for all liabilities of the Undersigned to you, however and whenever arising, and you are hereby authorized, without further notice to the Undersigned, and without regard to whether you have in your possession or subject to your control at the time thereof other securities, commodities or contracts for commodities or securities of the same kind and amount, in the usual course of business to repledge, rehypothecate (either for the amount due you from the Undersigned, or for a greater sum) and loan the same from time to time separately or together with other securities either generally or to or for account of your other customers; and you shall not be required to deliver to the Undersigned the same certificates or securities deposited or received but only certificates or securities of the same kind and amount. In your discretion you may without notice transfer any money, property or equity interchangeably between any of the Undersigned's accounts or from any such accounts to any account guaranteed by the Undersigned.

It is understood that it is your practice to segregate collateral from time to time in excess of margin requirements and earmark same as customer's property. It is agreed that whenever and as often in your sole discretion you shall require further margin for any of Undersigned's accounts, any excess collateral may without notice be withdrawn from such segregation and transferred to such account, there to be held as if never segregated or earmarked.

You may from time to time demand additional security or that any account be immediately taken up and paid, and all amounts advanced and other balances due, with interest at the current rate, and all commissions fixed by the regulations and usages of the exchange or market where orders are executed shall be due and payable upon demand;

You may employ sub-brokers and shall be responsible only for reasonable care in their selection, and may settle contracts and controversies according to the regulations and customs of the exchange or market where orders are executed;

Upon failure of the Undersigned to comply with any of the provisions hereof, or whenever deemed necessary for your protection, you are hereby authorized and empowered to sell, assign and deliver all or any part of the securities, commodities or contracts for commodities or securities pledged hereunder upon any exchange or market or at any public or private sale, at your option, and/or to purchase to cover short sales and without demand for margin, and without advertisement or notice of purchase or sale, which are hereby expressly waived and no specific demand or notice shall invalidate this waiver; and after deducting all costs and expenses of purchase or of sale and delivery, including commissions, transfer and stamp taxes, to apply the residue of the proceeds to the payment of the liabilities of the Undersigned to you, returning the surplus, if any, to the Undersigned; and upon any sale other than a private sale you may purchase the whole or any part thereof free from any right of redemption; and the Undersigned shall remain liable for any deficiency;

All statements of account, notices or demands hereunder may be made by depositing the same in writing in the United States mails directed to the Undersigned at the address given below, or any other address of the Undersigned;

Notices and demands may, however, be given by you by any other means of communication;

Monthly debit-balances on accounts shall be charged in accordance with your usual custom with interest at a rate which shall include the average rate paid by you on your general loans during the month covered by such balances respectively, and any extra rates caused by market stringency, together with a charge to cover your credit service and facilities;

In all transactions wherein you act as the Undersigned's agent, the Undersigned agrees to wholly indemnify and save you free and harmless from any loss, damage or liability arising out of such transaction howsoever same may occur and the Undersigned agrees promptly to pay on demand any loss or debit-balance arising in any account of the Undersigned;

Whenever you shall elect to give Undersigned notice to liquidate his account, no oral agreement on the part of any of your agents agreeing to adjournment shall be binding; all such agreements must be in writing;

This agreement shall be irrevocable as long as the Undersigned shall have any account with you. Rights and privileges hereunder shall continue in the event of the death or incompetence of Undersigned.

*The Undersigned hereby represents that he is of full age and sound mind, that he is not connected as a clerk or employee with the New York Stock Exchange or any other exchange nor with a member of that Exchange or any other exchange engaged in the business of dealing in securities or commodities, nor is he connected as a clerk or employee with any bank, trust company, banker or insurance company, nor with any broker, firm or corporation engaged in the business of dealing in securities or commodities.

This agreement and all transactions pursuant hereto, including but not limited to the maximum lawful rate of interest you may charge, shall be governed by the laws of the State of Missouri.

Yours truly,

Date________________________, 19______

X________________________________

____
city state

X________________________________

You and your successors (hereinafter referred to as you) are hereby authorized without further notice at your risk to loan from time to time securities that may be held by you in the undersigned's accounts, either generally or to or for account of your other customers.

This authority shall apply to all accounts under undersigned's control and shall be revocable at any time by written notice addressed and delivered to you at your office

Dated______________________________ Yours truly,

X____

X____

*This clause is part of the agreement only in the case of individual customers.

Client Qualification Form - Commodities

Paine Webber Jackson & Curtis Incorporated

A - GENERAL CONSIDERATIONS

Client Name:______________________ Social Security or Taxpayer ID#:________________

Resident Address:__________________ Phone:____________________

Business Address:__________________ Phone:____________________

Occupation:________________________ Years employed in Present Job:____

Approximate Client Ages: _____ Under 25; _____ 25-39; _____ 49-54; _____ 55-65; _____ Over 65; ______
Specify

How was interest in commodities generated:
1. Response to ads or prospecting call________ 3. Referral___________
2. Walk in or call in_______________ 4. Other_____________

Does client have existing securities account with PWJ&C: #_______________

#_______________

B - INVESTMENT OBJECTIVE AND HOW CLIENT PROPOSES TO CONDUCT COMMODITY BUSINESS:

1. Hedge or trade account:______________________________

2. Speculation:______________________________

3. Other (Specify):______________________________

C - INVESTOR BACKGROUND

Annual Income or Tax Bracket:____________ Net Worth:______________
Available Speculative Capital:____________ Liquid Net Worth:______________

Past investment experience (specify size, frequency of transaction, and number of years experience):

1. Options:______________________________

2. Stocks/Bonds:______________________________

3. Commodities (specify, with PWJC or another firm):______________________________

4. Real Estate:______________________________

D - RISKS AND RESPONSIBILITIES CLAUSE

Your commodity broker has explained to me fully the potential risks involved in my opening and maintaining a commodity account with PWJ&C; my responsibilities for meeting margin calls and making settlements promptly and for my performing in accordance with all of the other agreements I have entered into in conjunction with opening this account and, where applicable for making and receiving deliveries. After considering the foregoing, and attesting to the accuracy of the statements made in this form, I herewith apply to open a commodities with Paine, Webber, Jackson & Curtis Incorporated:

Signed________________________ Date:________________
Client

Signed________________________ Date:________________
Commodity Broker

Approved By:________________________ Date:________________
Branch Office Manager

Accepted By:________________________ Date:________________
National Commodity Adminstrator

Hedge Account

HEINOLD COMMODITIES INC. Affiliated with Heinold Hog & Cattle Markets

ACCOUNT NO. ____________________

DATE ____________________

GENTLEMEN:

THIS IS TO CERTIFY THAT THE TRANSACTIONS IN THE FOLLOWING ACCOUNT:

NAME ____

ADDRESS ____

____

CITY ____________________ STATE ____________________ ZIP ____________

ACCOUNT NUMBER ____

WILL BE FOR HEDGING PURPOSES.

VERY TRULY YOURS,

____

TM 3

SH U4-10

600

601

MARKETING

UNIT IV

TEST

1. Discuss in writing what to look for in selecting a broker.

2. List six things that can be expected of a broker.

   a.

   b.

   c.

   d.

   e.

   f.

3. Discuss in writing the procedure in opening an account.

4. Match margin requirements with types of accounts.

   _____1. Speculative

   _____2. Hedging

   A. Three times as much margin required

   B. Two times as much margin required

   C. One-third as much margin required

   D. One-half as much margin required

TEST

5. Discuss in writing the procedure in operationg an account.

6. List the types of margin with their purpose.

MARKETING

UNIT IV

ANSWERS TO TEST

1. Discussion should include the following:

   A. Location is normally of little importance

   B. Personalities are important since 95% of all communications will be by telephone

   C. Know what a brokerage firm offers (Example: What types of commodities and accounts)

   D. Know the brokerage firm's financial stability

   E. Characteristics to look for in an individual broker

      1) Honesty and truth

      2) Professional businessman -- keep your relationship on a business basis, not a personal one

      3) Brokers should feel at ease in working with the commodity that your raise

      4) The broker should put your needs first and his commission second

2. A. Complete analysis of your entire operation from both a production and a marketing standpoint

   B. A broker needs to know your capacity of farm storage facilities, your normal marketing channels and your financial position

   C. A broker should supply you with market information

   D. He should be willing to explain the mechanics of the futures market

   E. He should keep you informed on the various types of orders that can be used

ANSWERS TO TEST

F. Service from your broker should be an important aspect of your marketing program

3. Discussion should include the following:

   Fill out account forms

   A. Ten to twenty pages in length

   B. Your financial responsibilities

   C. The brokerage firm's financial responsibilities

   D. Your financial stability

4. 1) B

   2) D

5. Discussion should include the following:

   A. Sign hedging statement saying that your only purpose is to hedge in your commodity account

   B. Make credit check - most firms do a thorough financial check into all of the credit sources of a potential client

   C. Deposit money

      1) Most firms require you to deposit $3,000 to $5,000

      2) Some brokerage firms only require you to deposit an amount equal to the minimum margin requirement

   D. Enter an order

      1) Call broker

      2) Broker will call back when order is executed

   E. Margin calls

      1) The purpose of a margin call is to maintain a total equity equal to the margin requirement of the particuluar commodity

ANSWERS TO TEST

2) Most brokerages allow you 3 to 5 days to get the money to them

3) Some brokerages require the money to be deposited before the market opens the next day

4) Wire transfer systems may be utilized for the immediate transfer of funds

5) Once a margin call is made the money must almost always be deposited even though the market may move in your favor

F. Withdraw surplus - Use margin surplus rather than savings accounts

G. Deposit treasury bills

1) When a brokerage account exceeds a deposit of $10,000, most firms will allow you to use short-term treasury bills as margin for your position

2) This allows you to earn the interest on the margin money

6. A. Initial margin -- the deposit required to open an account

B. Maintenance margin -- the deposit required to keep the total equity equal to the amount predetermined by the brokerage for your particular commodity

MARKETING

UNIT V

LIVESTOCK FUTURES

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to calculate livestock futures basis, calculate production costs and analyze marketing opportunities. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. List the two methods of calculating basis.
2. List the items included in the Actual Cost method of determining basis.
3. Use a Cost Worksheet to compute production costs.
4. Demonstrate the ability to use a hedging worksheet.
5. List four common errors in trading Livestock Futures.
6. List three purposes of combination.
7. Demonstrate the ability to:
    a. Compute the target price and analyze when a hedge should be placed (Assignment Sheet #1)
    b. Compute the anticipated profit (Assignment Sheet #2)

MARKETING

UNIT V

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and give to Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Cost Worksheet

   TM 2 - Hedging Worksheet

   TM 3 - Avoid Overtrading
4. Assignment Sheets

   #1 - Live Beef Futures Problems (5 sheets)

INSTRUCTIONAL MATERIALS

5. Answers to Assignment Sheets
6. Test
7. Answers to Test

References:

1. Bernstein, Jake. Seasonal Chart Study 1953-1976: An Analysis of Seasonal Cash Commodity Price Tendencies. Winnetka, IL: MBH Commodity Advisors, 1977.
2. Chicago Board of Trade. Commodity Trading Manual, revised edition. Chicago: Chicago Board of Trade, 1976.
3. Commodities and Futures Trading, 1976. (Corporate Law & Practice Course Handbook Series 1976-77; Vol. 223) New York: Practicing Law Institute, 1976.
4. Commodity Research Bureau. Commodity Yearbook. New York: (Annual).
5. Commodity Yearbook Statistical Abstract Service. New York: (Published 3 times per year to supplement Commodity Yearbook).
6. Understanding the Commodity Futures Markets, 1977 edition. New York: Commodity Research Bureau, 1977.
7. Doyle, Thomas L., Jr. Live Cattle, Live Hogs and Frozen Pork Bellies. Los Altos, CA: Futures Research Co., 1976.
8. Lawrence, James C. Your Fortune in Futures: A Guide to Commodity Futures Trading. New York: St. Martin's Press, 1976.
9. Lindsay, Charles. Trident, A Trading Strategy, 2nd ed. Waterloo, IA: Investor Publications, 1977.
10. Oster, Merrill J. Commodity Futures for Profit. Cedar Falls, IA: Professional Farmers of America, 1978.
11. Parris, Frank G. and Joseph J. Tedesco. The Commodity Market--How It Works, revised and enlarged edition. Ft. Lauderdale, FL: Parris & Company Commodity Service, 1976.

INSTRUCTIONAL MATERIALS

12. Powers, Mark J. Getting Started in Commodity Futures Trading, 2nd ed. Cedar Falls, IA: Investor Publications, 1977.

13. Prestbo, John, ed. The Dow Jones Commodities Handbook: A Guide to Major Futures Markets. Princeton, NJ: Dow Jones Books, 1977.

Audio-Visual Materials

C.M.E. Films:

1. What It Takes to Speculate--16 mm, color, sound. Available on loan from Modern Taling Pictures, 2020 Prudential Plz., Chicago, IL 60601. (312) 337-3252. About 15 minutes.

2. Your Profit in Futures--(Hedger) 16 mm, color, sound. Available on loan from the Farm Film Foundation, 1425 H Street, NW, Washington, D.C. 20005, (202) 628-1321. About 15 minutes.

Slides and Tapes:

1. Hedging Effectively--35 mm slide/script presentation. Modules for cattle, hogs, eggs, lumber, russet Burbank potatoes, and turkeys. Basic presentation with any one module $25.00. Additional modules $5.00 each. From C.M.E.

2. Hedging with Live Beef Futures, produced by Iowa State University, Ames, IA 50010. 35 mm slide/tape presentation.

3. Using Futures Trading in Live Hogs, 35 mm slides, University of Tennessee, Agricultural Extension Service, Knoxville, TN 37901.

4. The Commodity Futures Market, (General Introduction to Futures Markets and Hedging) 35 mm slides, Oregon State University, Department of Agricultural Economics, Corvallis, OR 97331.

MARKETING

UNIT V

INFORMATION SHEET

I. Calculating Basis in Livestock Futures

   A. Historical local cash - futures price relationships requires past price data for both the location represented by the future price and the local market

   B. Actual costs to deliver the physical commodity to the delivery point designated in the futures contract

II. The Actual Cost Method of Determining Basis

   A. Transportation cost

   B. Shrinkage

   C. Insurance

   D. Miscellaneous expenses:

      1. Marketing expenses
      2. Brokerage fees
      3. Interest on margin deposits
      4. Differences in the weight - quality specific of the contract and the livestock delivered

III. Calculating Production Costs by Use of a Cost Worksheet (TM 1)

IV. Using a Hedging Worksheet (TM 2)

(NOTE: Column F uses a code system to show favorable hedging opportunities. 10 high - 1 low)

V. Four Common Errors in Trading Livestock Futures (TM 3)

   A. Failure to relate the futures position to the cash position in size.

   Example: You have decided to replace the cash pricing of 35 choice steers with one futures contract and then decide that since that looks good you will replace it with five contracts. The first one is Hedging, the other four are Speculating.

INFORMATION SHEET

B. Positions in futures must be opposite the cash position

Example: If you are trying to establish a price for cattle on feed, you are "holding" the cash commodity and therefore must sell futures. If you buy futures, you are simply compounding the risk.

C. Failure to close out the cash and futures positions simultaneously

D. Trading in and out of the market too frequently - nothing other than speculating

VI. Three Purposes of Combination (Dual) Hedge

A. Used to protect against an increase in grain (feed) prices and at the same time, lock in an approximate selling price for the livestock.

B. With the dual hedge you are on opposite sides of the market for grain and livestock.

1. You are hedging grain against an upturn in prices, therefore, you are "long".
2. For livestock, your hedge is against a downturn in prices, therefore, you are "short".

C. The hedge will be most rewarding if grain prices increase and/or livestock prices decrease during the hedging period.

SH U5-8

COST WORKSHEET

IT IS ESSENTIAL IF YOU ARE TO HEDGE EFFECTIVELY, AND ALSO IS GOOD BUSINESS PRACTICE, TO ESTIMATE THE VARIABLE AND FIXED COSTS ASSOCIATED WITH FEEDING YOUR LIVESTOCK TO MARKET WEIGHT AND IN THIS WAY TO DETERMINE YOUR BREAK-EVEN SALE PRICE. THE FOLLOWING COST WORKSHEET WILL GUIDE YOU THROUGH THIS PROCEDURE: (UNLESS OTHERWISE INDICATED, ALL COSTS ARE PER HEAD.)

I. Variable Costs

A. Feeder Purchase ______ LBS. @ ______ /LB. = ______

B. Feed Cost

1. Corn ______ BU. @ ______ /BU. = ______

2. Silage ______ TONS @ ______ /TON = ______

3. Supplement ______ LBS. @ ______ /LB. = ______

4. Other ______ @ ______ ______

5. Other ______ @ ______ ______

Total Feed Cost (Cost of Gain) . . . . ______

C. Other Variable Costs

1. Vet & Medicine ______

2. Death Loss (2% of Line A for calves, 1% for yearlings) ______

3. Marketing, commission charges, trucking expense[1] ______

4. Power, Fuel, Equipment Repairs[2] ______

5. Interest, insurance, taxes on feed and cattle[3] ______

6. Hedging Costs

Brokerage Commission ______

Interest on Margin ______

7. Miscellaneous ______

Total Variable Costs . . . . ______

II. FIXED

A. BUILDINGS & EQUIPMENT[4] ________

B. LABOR ______HRS. @______/HR.[5] = ________

TOTAL FIXED COSTS . . . . ________

TOTAL OF ALL COSTS (VARIABLE + FIXED) PER HEAD . . . . ________

III. BREAK-EVEN PRICE (PER HUNDREDWEIGHT)
(DIVDED TOTAL COST PER HEAD BY MARKET WEIGHT PER HEAD) . . . . ________

[1] INCLUDE COMMISSION COST OF PURCHASING FEEDER ANIMAL AND HAULING TO FARM, AND COMMISSION COSTS OF MARKETING FED ANIMAL AND HAULING TO MARKET.

[2] POWER, FUEL, AND EQUIPMENT REPAIR COSTS ARE ESTIMATED TO BE $4 TO $6 PER HEAD.

[3] EQUAL TO 10.0% (.10) TIMES THE FOLLOWING: PURCHASE PRICE OF STEER PLUS VALUE OF CORN FED PLUS VALUE OF CORN SILAGE FED PLUS ONE-HALF OF THE VALUE OF SUPPLEMENT, SALT, AND MINERAL FED. THIS VALUE IS THEN MULTIPLIED BY THE FRACTION OF THE YEAR THAT IS THE FEEDING PERIOD.

[4] EQUAL TO 14% OF THE CURRENT INVESTMENT IN SHELTER, SILAGE STORAGE, AND FEED-HANDLING AND OTHER EQUIPMENT ASSOCIATED WITH THE CATTLE-FEEDING ENTERPRISE. IT IS ASSUMED THAT STORAGE FOR CORN IS INCLUDED IN THE PRICE OF CORN.

[5] ESTIMATED TO BE 4 TO 6 HOURS PER HEAD TYPICALLY, WITH LONG-FED CATTLE REQUIRING THE LARGER AMOUNT.

SOURCE: ADAPTED FROM A STUDY MADE BY PURDUE UNIVERSITY.

SH U5-9

HEDGING WORKSHEET

(FOR ONE CROP)
(ALL PRICES IN DOLLARS AND CENTS PER HUNDREDWEIGHT)

NUMBER OF HEAD ____________
EST. AVG. MARKETING WEIGHT ____________
EST. MARKETING DATE ____________
HEDGING POTENTIAL (MAX. NO. OF CONTRACTS) ____________
FUTURES DELIVERY MONTH ____________
COST OF DELIVERY BASIS ____________

DATE	TODAY'S FUTURES PRICE	ESTIMATED BASIS (HISTORICAL)	LOCALIZED FUTURES PRICE	BREAK-EVEN PRICE	ESTIMATED PROFIT (LOSS)	HEDGING STRATEGY*
7/18	$40.10	$1.25	$38.85	$41.25	$(2.40)	2
8/13	40.25	1.25	39.00	41.25	(2.25)	2
9/3	40.50	1.25	39.25	41.25	(2.00)	2
10/9	41.00	1.25	39.75	41.25	(1.50)	3
11/6	42.50	1.25	41.25	41.25	-0-	3
11/15	43.50	1.25	42.25	41.25	1.00	6
11/26	44.25	1.25	43.00	41.25	1.75	7
11/30*	45.00	1.25	43.75	41.25	2.50	8
12/5	46.00	1.25	44.75	41.25	3.50	10
1/4	44.50	1.25	43.25	41.25	2.00	7
1/23	43.00	1.25	41.75	41.25	.50	5
2/6	42.75	1.25	41.50	41.25	.25	4

* RATING SCALE (10 HIGH, 1 LOW)

* INITIATED FUTURES HEDGE DATE 11/30 NO. CONTRACTS 4 PRICE $45.00
OFFSET FUTURES HEDGE DATE 2/6 NO. CONTRACTS 4 PRICE $42.75
PROFIT (LOSS) ON FUTURES $ 2.25
SALE (CASH) PRICE OF LIVESTOCK $ 41.25
REALIZED SALE PRICE $ 43.50
COST OF PRODUCTION $ 41.25
PROFIT (LOSS) PER HUNDREDWEIGHT $ 2.25

AVOID OVERTRADING

- CONFINE TRADING ACTIVITY TO MANAGEABLE PROPORTIONS.
    - STEP UP LEVEL OF TRADING NO MORE THAN EVERY SIX MONTHS.
        - AVOID PYRAMIDING.
            - WHEN IN DOUBT, STAY OUT!
                - DON'T BITE OFF MORE THAN YOU CAN CHEW.

MARKETING

UNIT V

ASSIGNMENT SHEET #1: Live Beef Futures Problems

Problem #1

Assume: a) A cattle feeder purchased 40 head of 700 lb. choice feeders in January.

b) Feeder cattle cost $17.50/cwt. or $192/head.

c) It takes about 4½ months to feed to 1100 pounds and, therefore, the cattle will be ready for market in early June.

d) Cost of feeding from 700 lbs. to 1100 lbs. is $54.00/cwt.

e) June, Chicago, live beef cattle futures closed at $36.80 on January 15 (Omaha base).

f) Cattle will fit contract specifications at the end of the feeding period.

g) Costs of delivery on the futures contract were estimeated as follows:

Broker's commission and interest on the margin	$ .40/cwt.
Marketing costs	.50/cwt.
Transportation to Omaha	.50/cwt.
Shrink loss	.40/cwt.
TOTAL	$ 1.80/cwt.

(1) What would be the target price for the cattle if the feeder hedged?

(2) What would be the anticipated profit if the feeder hedged?

(3) Should the feeder hedge?

ASSIGNMENT SHEET #1

Problem #2

Assume:
- a) The Chicago futures price (Omaha basis) is $1.00/cwt. higher in delivery month than local price.
- b) Feeder sold February live beef futures in September for $40.00/cwt.
- c) Feeder bought February live beef futures in February for $36.00/cwt. and sold fat cattle locally at the same time.
- d) Cost of futures transaction is $0.20/cwt.

Problem #3

Assume:
- a) The Chicago futures price (Omaha basis) is $1.50/cwt. higher in delivery month than local price.
- b) Feeder sold February live beef futures in September for $40.00/cwt.
- c) Feeder bought February live beef futures in February for $45.00/cwt. and sold fat cattle locally at the same time.
- d) Cost of futures transaction is $0.40/cwt.

What would be the net price for these fat cattle if they were hedged?

Problem #4

What would be the net price in Problem #2 if the cattle were not hedged?

Problem #5

What would be the net price in Problem #3 if the cattle were not hedged?

ASSIGNMENT SHEET #1

Problem #6

Assume:
- a) Initial margin requirement for live beef futures contract is $400. (40,000 lb. contract)
- b) Maintenance margin requirement for live beef futures contract is $300.
- c) Futures price moved steadily downward in Problem #2 and steadily upward in Problem #3.

(1) What initial and additional margin deposit would be required in Problem #2.

(2) What initial and additional margin deposit would be required in Problem #3.

Problem #7

Assume:
- a) In September cattle feeder sold February live beef futures for $40.00/cwt.
- b) In February cattle feeder bought February live beef futures for $40.00/cwt.
- c) In February the cash price at Omaha was $39.50/cwt.
- d) In February the cash price locally is $1.00/cwt. under the Omaha cash price.
- e) Cost of futures transaction is $0.40/cwt.
- f) Marketing costs are the same as those used in Problem #1.

(1) What is the net price received under the hedge?

(2) What would have been the net price if the futures price and the Omaha cash price had been equal in February?

(3) What would have been the net price if cattle were delivered under the contract rather than taking an offsetting position in the futures market?

ASSIGNMENT SHEET #1

Problem #8

Assume:
- a) Feeder is feeding heifers and wants to hedge in futures market.
- b) In September, February futures for choice steers are $40.00/cwt.
- c) Total cost of putting 900 pound heifers on the market is $35.00/cwt.
- d) The normal discount between choice steers and choice heifers is $2.00/cwt.
- e) Total futures and marketing costs are $1.80/cwt.

(1) What is the anticipated profit if these heifers are hedged?

(2) What additional difficulties could be incurred from hedging heifers?

Problem #9

A feeder plans on marketing choice steers but they do not finish out as well as expected, so the steers actually only average high good when sold. The feeder has hedged his feeding operation.

Assume:
- a) In September, feeder sold February futures for $40.00/cwt.
- b) In February feeder bought February futures for $38.00/cwt. and sold cattle on cash market
- c) Omaha cash was $0.50/cwt. below Omaha futures
- d) Local market was $1.00/cwt. below Omaha cash
- e) Good steers sold $1.25/cwt. below choice steers
- f) Cost of futures transaction is $0.40/cwt.

ASSIGNMENT SHEET #1

(1) What was the net price received for steers if they were hedged?

(2) What would have been the net price if they were not hedged?

(3) What would have been the net price if the cattle had been hedged and they met specifications for choice grade?

(4) What would have been the price if the cattle had fit the choice specifications and if the Omaha cash and futures market had been identical?

Problem #10

A cattle feeder is considering the purchase of 200 lightweight feeder calves in mid October. His plan is to "background" them throughout the winter and then place them on full feed the next spring. He makes the following assumptions:

a) 400 lb. feeder calves could be purchased for $55.00/cwt.

b) Calves are expected to gain 2.2 lbs. per day at an overall cost of gain of $42.00/cwt.

c) Cattle will weigh 1050 lbs. by next August

d) August futures price for live beef cattle is $46.00/cwt.

e) Cost of futures transaction is 20¢/cwt.

f) Omaha cash and futures prices will be the same at marketing time, but a $1.00 differential is likely to exist between Omaha and local cash prices

(1) Should the cattle feeder buy these calves and hedge them with live beef futures?

(2) Under what circumstances should the cattle feeder buy these calves?

MARKETING

UNIT V

ANSWERS TO ASSIGNMENT SHEET #1

1. (1) $35.00/cwt.

   (2) $23.50/hd. loss

   (3) No

2. $38.80

3. $38.10

4. $35.00

5. $43.50

6. (1) $400 initial margin
   0 additional margin

   (2) $400 initial margin

   $2000 additional margin

7. (1) $38.10

   (2) $38.60

   (3) $38.20

8. (1) $1.20/cwt. or $10.80/hd.

   (2) a) Cannot deliver heifers on futures contract

   b) Steer-heifer differential not always $2.00/cwt.

9. (1) $36.85

ANSWERS TO ASSIGNMENT SHEET #1

(2) $35.25

(3) $38.10

(4) $38.60

10. (1) No: Costs = $495.10

Returns = $472.50 (1050 lbs. @ $45/cwt.)

(2) If feeder expects August fed cattle price to be higher than $45 locally.

MARKETING

UNIT V

TEST

1. List the two methods of calculating basis

   a.

   b.

2. Select from the list below the separate costs used in determining the Actual Cost method of determining basis. Place an "X" in front of the correct answer.

   _____a. Transportation

   _____b. Feed Costs

   _____c. Insurance

   _____d. Shrinkage

   _____e. Brokerage fees

   _____f. Interest on margin deposits

3. Complete a Cost Worksheet to compute production costs.

4. Complete a hedging worksheet.

5. List four common errors in trading Livestock Futures.

   a.

   b.

   c.

   d.

6. List three purposes of a Combination Hedge.

   a.

   b.

   c.

TEST

7. Complete problems in Assignment Sheet #1.

MARKETING

UNIT V

ANSWERS TO TEST

1. a. Historical local cash - futures price relationships

   b. Actual costs to deliver the physical commodity to the delivery point designated in the futures contract.

2. a,c,d,e,f

3. Complete a Cost Worksheet to the satisfaction of the instructor.

4. Complete a hedging worksheet to the satisfaction of the instructor.

5. a. Failure to relate the futures position to the cash position in size.

   Example: You have decided to replace the cash pricing of 35 choice steers with one futures contract and then decided that since that looks good you will replace it with five contracts. The first one is Hedging, the other four are Speculating.

   b. Positions in future must be opposite the cash position.

   Example: If you are trying to establish a price for cattle on feed, you are "holding" the cash commodity and therefore, must sell futures. If you buy futures, you are simply compounding the risk.

   c. Failure to close out the cash and futures positions simultaneously.

   d. Trading in and out of the market too frequently - Nothing other than speculating.

6. Explanation should include the following:

   a. Used to protect against an increase in grain (feed) prices and at the same time, lock in an approximate selling price for the livestock

   b. With a dual hedge you are on opposite sides of the market for grain and livestock

      1) You are hedging grain against an upturn in prices therefore, you are "long"

ANSWERS TO TEST

2) For livestock, your hedge is against a downturn in prices, therefore, you are "short"

c. The hedge will be most rewarding if grain prices increase and/or livestock prices decrease during the hedging period.

7. Complete the problems in Assignment Sheet #1 to the satisfaction of the instructor.

MARKETING

UNIT VI

GRAIN FUTURES

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to weigh the advantages of using grain futures in the various production areas. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. List six preliminary steps before hedging.
2. State four ways of using grain futures.
3. List three advantages and three disadvantages of forward contracting.
4. List a strategy for hedging for stored grain.
5. List five factors in closing out a hedge.
6. List three conditions for hedging the cost of feed.
7. State three factors to consider in speculating on the price of grain.
8. Demonstrate the ability to:
   - a. Compute basis.(Assignment Sheet #1)
   - b. Compute grain futures target prices.(Assignment Sheet #2)
   - c. Determine whether to hedge or forward contract.(Assignment Sheet #3)

MARKETING

UNIT VI

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Discuss Terminal and Specific Objectives
4. Discuss Information and Assignment Sheets
5. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and give to Instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Assignment Sheets
   - #1 - Corn Basis Problem
   - #2 - Grain Futures Problems
   - #3 - Corn Contracting Problems
4. Answers to Assignment Sheets
5. Test
6. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. Bernstein, Jake. *Seasonal Chart Study 1953-1976: An Analysis of Seasonal Cash Commodity Price Tendencies.* Winnetka, IL: MBH Commodity Advisors, 1977.
2. Chicago Board of Trade. *Commodity Trading Manual*, revised edition. Chicago: Chicago Board of Trade, 1976.
3. *Commodities and Futures Trading*, 1976 (Corporate Law & Practice Course Handbook Series 1976-77; Vol. 223) New York: Practicing Law Institute, 1976.
4. Commodity Research Bureau. *Commodity Yearbook*. New York: (Annual).
5. *Commodity Yearbook Statistical Abstract Service*. New York: (Published 3 times per year to supplement *Commodity Yearbook*.)
6. *Understanding the Commodity Futures Markets*, 1977 edition. New York: Commodity Research Bureau, 1977.
7. Doyle, Thomas L., Jr. *Live Cattle, Live Hogs and Frozen Pork Bellies*. Los Altos, CA: Futures Research Co., 1976.
8. Lawrence, James C. *Your Fortune in Futures: A Guide to Commodity Futures Trading*. New York: St. Martin's Press, 1976.
9. Lindsay, Charles. *Trident, A Trading Strategy*, 2nd ed. Waterloo, IA: Investor Publications, 1977.
10. Oster, Merrill J. *Commodity Futures for Profit*. Cedar Falls, IA: Professional Farmers of America, 1978.
11. Parris, Frank G. and Joseph J. Tedesco. *The Commodity Market--How It Works*, revised and enlarged edition. Ft. Lauderdale, FL: Parris & Company Commodity Service, 1976.
12. Powers, Mark J. *Getting Started in Commodity Futures Trading*, 2nd ed. Cedar Falls, IA: Investor Publications, 1977.
13. Prestbo, John, ed. *The Dow Jones Commodities Handbook: A Guide to Major Futures Markets*. Princeton, NJ: Dow Jones Books, 1977.

INSTRUCTIONAL MATERIALS

References (continued):

Audio-Visual Materials

C.M.E. Films:

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3. Using Futures Trading in Live Hogs, 35 mm slides, University of Tennessee, Agricultural Extension Service, Knoxville, TN 37901.

4. The Commodity Futures Market, (General Introduction to Futures Markets and Hedging) 35 mm slides, Oregon State University, Department of Agricultural Economics, Corvallis, OR 97331.

Video Tape:

1. "Principles and Application of Hedging," 104 minutes with instruction manual, Agricultural Extension Service, North Carolina State University, Raleigh, NC 27607.

MARKETING

UNIT VI

INFORMATION SHEET

I. Preliminary Steps Before Hedging

A. Localized the futures price or calculate the basis.

B. Estimate the size or quantity of your cash sale. If the quantity represented by the futures contract exceeds the expected cash sale you will be speculating instead of hedging on the excess.

C. Estimate returns on a hedge.

D. Study market outlook reports.

E. Estimate returns without hedging.

F. Compare returns with and without hedging, and consider your ability to absorb risk.

II. Ways of Using Grain Futures for Hedging

A. Setting the price of a crop before harvest.

B. Setting the price of grain in storage for later delivery.

C. Fixing the cost of feed without taking immediate delivery.

D. Speculating on the price of grain that has been grown but for which storage is not available.

III. Forward Contracting

A. Advantages of forward contracting

1. The exact price is known when the contract is made, subject, of course, to normal discounts for grain below certain specified minimum standards.

2. Contract sizes are variable.

3. No margin deposits are required; there, money may be used elsewhere.

B. Disadvantages of forward contracting

INFORMATION SHEET

1. Forward contract price will be slightly lower than the target price obtained from the futures market.
2. A typical forward contract requires delivery.
3. There is no opportunity to "shop-around" for the highest cash price at harvest time.

IV. Hedging Strategy for Stored Grain

A. The basis at the time the grain goes into storage

B. The current price

C. Price prospects during the storage period

V. Factors in Closing Out a Hedge

A. Depressed price at harvest time

B. Present price may be satisfactory, but income may be needed in the following year

C. May want grain on his farm until his feed requirements are known

D. May be desirable to keep a portion of a crop in reserve in case of crop failure

E. May have a considerable number of grain storage facilities on the farm from which revenue could be earned

VI. Conditions for Hedging the Cost of Feed

A. The cash price at the time you are considering the hedge is below the historical average

B. You are convinced cash prices will increase after careful studying of supply-demand prospects in market outlook reports

C. The basis is narrower than usual at the time the hedge is placed

INFORMATION SHEET

VII. Speculating on the Price of Grain

A. Speculation is a zero-sum game -- for every winner there must be a loser

B. Speculators assume risk

C. Speculators are concerned only with changes in the futures market prices

MARKETING

UNIT VI

ASSIGNMENT SHEET #1: Corn Basis Problem

You are given the following cash and futures prices for corn. Compute the basis for each of the months shown.

Month	July Futures Price	Topeka Cash Price	Basis
	(cents per bushel)		
	1971-72		
NOV.	125	102	
DEC.	128	106	
JAN.	128	110	
FEB.	127	112	
MAR.	126	112	
APR.	130	114	
MAY	127	115	
JUNE	125	115	
	1972-73		
NOV.	146	126	
DEC.	152	142	
JAN.	146	145	
FEB.	145	146	
MAR.	157	148	
APR.	155	141	
MAY	171	164	
JUNE	223	215	

QUESTIONS:

1. How much difference was there between the May, 1972, basis and the May, 1973, basis?

ASSIGNMENT SHEET #1

2. What was the change in the July futures price from June, 1972, to June, 1973? What was the change in Topeka cash prices?

3. What was the basis change from November, 1971, to June, 1972? From November, 1972, to June, 1973?

4. What accounted for the big change in basis values from early 1972 to early 1973?

MARKETING

UNIT VI

ASSIGNMENT SHEET #2: Grain Futures Problems

Problem #1 Localizing the Futures Price

Assume:
(1) The July wheat futures price in early March is $3.50 per bushel.

(2) Normal basis for the July futures in late June in the local area is 20¢ per bushel.

(3) Brokerage and interest costs total 3¢ per bushel.

(4) No quality adjustment is necessary.

What would be the target price in late June if the producer hedged?

Problem #2 Perfect Hedge (falling prices)

Assume: Producer sold November soybean futures in July for $4.90 per bushel.
(Target price = $4.60). Producer sold soybeans in October for $4.50 per bushel and bought back futures at $4.76 per bushel. Cost of futures transaction is 4¢ per bushel.

What would be the net price per bushel received for the hedged soybean?

Problem #3 Perfect Hedge (rising prices)

Assume: Producer sold November soybean futures in July for $4.90 per bushel. (Target price = $4.60). Producer sold soybeans in October for $5.10 per bushel and bought back futures at $5.35 per bushel. Cost of futures transaction is 5¢ per bushel.

What would be the net price received for the hedged soybean?

Problem #4

What would be the net price in Problem 2 if the soybeans were not hedged?

ASSIGNMENT SHEET #2

Problem #5

What would be the net price in Problem 3 if the soybeans were not hedged?

Problem #6

Assume 5,000 bushels of soybeans were hedged in Problem 2 and 3.

(a) What initial and additional margin deposits would be required in Problem 2?

(b) In Problem #3?

Assume: Initial margin requirement is 50 cents per bushel, maintenance margin is 25 cents per bushel.

Problem #7

Producer sells 10,000 bushels of corn for $1.75 per bushel in November and buys 10,000 bushels of July futures at $2.10 per bushel. Then, next June he sells the futures contracts at $1.90 per bushel. Cost of the futures transaction is 3 cents per bushel.

What would be the net price per bushel on the 10,000 bushels of corn?

Problem #8

Suppose the producer in Problem 7 sold the futures contracts instead of buying them. Assume the cost of the futures transaction is 2 cents per bushel.

What would be the net price per bushel on the 10,000 bushels of corn?

Problem #9

A producer has 15,000 bushels of corn in storage on November 15. The July futures contract at that time is selling for $1.85 per bushel, and the cash price in his area is $1.50 per bushel.

ASSIGNMENT SHEET #2

Assume: (1) Normal basis (mid-June) is \$.13 per bushel

(2) Brokerage and interest costs are \$.01 per bushel

(3) No quality differential is needed

If the producer were to hedge, what would be the target price in his area in mid-June? How much would this leave to cover storage costs?

Problem #10 Imperfect Hedge

Assume the producer in Problem 9 did store and hedge his corn and sold it the following June.

Assume mid-June prices were: July futures = \$1.81 per bushel, local cash = \$1.66 per bushel.

(a) What would be the procedure for placing and completing the hedge?

(b) What would be the net price received on the hedged grain?

(c) What would be the return if the hedge had been perfect?

Problem #11

A cattle feeder knows that he will need additional corn in future, but he is not yet ready to take delivery. However, he decides to "lock-in" the price of the grain with a hedge.

Assume: (1) A total of 10,000 bushels will be needed by June 1.

(2) Cash price on Dec. 1 is \$1.75/bushel; cash price on June 1 is \$1.93/bushel.

(3) July futures price on Dec. 1 is \$1.88/bushel; July futures price on June 1 is \$2.00/bushel.

(4) Brokerage and interest costs total \$.02 per bushel.

(a) What would be the procedure for placing and completing the hedge?

(b) What would be the net price paid on the hedge grain?

(c) What would be the net price paid if the grain had not been hedged?

MARKETING

UNIT VI

ASSIGNMENT SHEET #3: Corn Contracting Problems

1. Pre-harvest Contracting

--Deferred bid from elevator for November delivery of corn	$2.16/bu.
--Basis of December futures in late November for local area	20¢/bu.
--Chicago December futures price in spring of year	$2.41/bu.
--Cost of futures trading	1¢/bu.

Which of these contracts, (1) Chicago futures or (2) elevator contract should the producer choose? Why?

1. Storage Contracting

A producer that has harvested his corn has the following choices:

1) hedge in futures
2) sell on deferred delivery to elevator
3) sell at harvest
4) store and remain open
5) seal corn under government program

Assume the following in known:

November cash price	$1.90/bu.
Elevator deferred bid for May delivery	$2.01/bu.
Chicago May futures	$2.22/bu.
Basis for May futures in May	$ .15/bu.
Cost of storage to May (7 months)	7¢/bu.
Cost of drying for storage	3¢/bu.
Cost of futures trading	1¢/bu.
Cost of capital to operate until May	4¢/bu.
Anticipated cash corn price in May	$2.00 to $2.05/bu.

What is the net return from each of these transactions?

ASSIGNMENT SHEET #3

(1) Cash sale
(2) Deferred bid
(3) Futures hedge
(4) Storage and remain open

3. If I were buying corn for use after May for a feeding operation, using data in Problem 2, which of these would I choose? Why?

MARKETING

UNIT VI

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

1971-72 Basis: 23, 22, 18, 15, 14, 16, 12, 10
1972-73 Basis: 20, 10, 1, -1, 9, 14, 7, 8

Questions: (1) 5 cents

(2) 98 cents, $1.00

(3) 13 cents, 12 cents

(4) The winter of 72-73 was a particularly bad one for corn harvest; therefore, cash corn was in great demand relative to the futures.

Assignment Sheet #2

(1) $3.27/bushel
(2) $4.60/bushel
(3) $4.60/bushel
(4) $4.50/bushel
(5) $5.10/bushel
(6) a) $2,500
    b) $2,500 + 1,250
(7) $1.52/bushel
(8) $1.71/bushel
(9) $1.71/bushel
    21 cents
(10) a) Sell futures in November, store and buy futures when sale is made in cash market
     b) $1.69/bushel
     c) $1.71/bushel
(11) a) Buy futures in December, buy cash grain in June and sell futures at the same time
     b) $1.83/bushel
     c) $1.93/bushel

Assignment Sheet #3

1. The hedge would net $2.20 versus $2.16 from the contract. The contract is a "surer thing," however.

2. (1) $1.90
   (2) $1.87
   (3) $1.92
   (4) $1.86

3. (1) $2.00 - $2.05
   (2) $2.01
   (3) $2.08
   (4) $2.04

MARKETING

UNIT VI

TEST

1. List six preliminary steps before hedging.

2. State four ways of using grain futures.

3. List three advantages and three disadvantages of hedging in comparison to forward contracting.

4. List a strategy for hedging stored grain.

5. List five factors in closing out a hedge.

6. List three conditions for hedging.

7. State three factors to consider in speculating on the prices of grain.

8. Demonstrate the ability to:

   a. Compute basis (Assignment Sheet #1).

   b. Compute grain futures target prices (Assignment Sheet #2).

   c. Determine whether to hedge or forward contract (Assignment Sheet #3).

MARKETING

UNIT VI

ANSWERS TO TEST

1. A. Localize the futures price or calculate the basis

   B. Estimate the size or quantity of your cash sale. If the quantity represented by the futures contract exceeds the expected cash sale you will be speculating instead of hedging on the excess

   C. Estimate returns on a hedge

   D. Study market outlook reports

   E. Estimate returns without hedging

   F. Compare returns with and without hedging, and consider your ability to absorb risk

2. A. Setting the price of a crop before harvest

   B. Setting the price of grain in storage for later delivery

   C. Fixing the cost of feed without taking immediate delivery

   D. Speculating on the price of grain that has been grown, but for which storage is not available

3. A. Advantages of forward contracting

      1) The exact price is known when the contract is made, subject, of course, to normal discounts for grain below certain specified minimum standards

      2) Contract sizes are variable

      3) No margin deposits are required; there, money may be used elsewhere

   B. Disadvantages of forward contracting

      1) Forward contract price will be slightly lower than the target price obtained from the futures market

      2) A typical forward contract requires delivery

ANSWERS TO TEST

3) There is no opportunity to "shop around" for the highest cash price at harvest time

4. A. The basis at the time the grain goes into storage

   B. The current price

   C. Price prospects during the storage period

5. A. Depressed price at harvest time

   B. Present price may be satisfactory, but income may be needed in the following year

   C. May want grain on his farm until his feed requirements are known

6. A. Normally hedge only when one or more of the following conditions exist:

   1) The cash price at the time you are considering the hedge is below the historical average

   2) You are convinced cash prices will increase after careful studying supply-demand prospects in market outlook reports

   3) The basis is narrower than usual at the time the hedge is placed

7. A. Speculation is a Zero-sum game -- for every winner there must be a loser

   B. Speculators assume risk

   C. Speculators are concerned only with changes in the futures market prices

8. Complete the following to the satisfaction of the instructor:

   a) Compute basis (Assignment Sheet #1)

   b) Compute grain futures target prices (Assignment Sheet #2)

   c) Determine whether to hedge or forward contract (Assignment Sheet #3)

MARKETING

UNIT VII

GRAIN MARKETING PLAN

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to explain the importance of developing a grain marketing plan. The students will be able to identify the factors to consider when developing a marketing plan. The student will have completed this unit upon attainment of a score of at least eighty-five percent on the test and development of a marketing plan for their own farm.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Name four considerations of any marketing plan.
2. List four steps to follow when developing a marketing strategy.
3. List five factors which determine the marketing strategy.
4. Name five possible alternatives that a farmer can use in marketing his grain.
5. Name eight factors to consider in the development of a grain marketing plan.
6. Demonstrate knowledge of grain marketing by developing an individual marketing cash flow plan. (Assignment Sheet #1)
7. Demonstrate the development of a grain marketing plan.

MARKETING

UNIT VII

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information Sheets
6. Demonstrate and discuss procedures outlined in the Assignment Sheets
7. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets 1 & 2
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objective Sheet
2. Information Sheets
3. Transparency Master

   TM 1 - Marketing Plan
4. Assignment Sheets

   #1 - Marketing Plan Cash Flow

   #2 - Break Even Price for Wheat

INSTRUCTIONAL MATERIALS

5. Answers to Assignment Sheets
6. Test
7. Answers to Test

References:

1. Grain Pricing and Contracts, Cooperative Extension Service, Kansas State University, Manhattan, KS.
2. Marketing Alternatives for Producers of Wheat, Agricultural Information Office, South Dakota State University, Brookings, South Dakota 57006.

MARKETING

UNIT VII

INFORMATION SHEET

I. Considerations of Any Marketing Plan

   A. Production costs

   B. Cash flow

   C. Production risks

   D. Expected returns

   E. Risk preference

II. Steps to Follow When Developing a Marketing Strategy (TM 1)

   A. Outlook

   B. Production decisions

   C. Risk and financial factors

   D. Marketing alternatives

   E. Objectives

III. Shaping One's Marketing Strategy

   A. Risk

   B. Pricing and marketing objectives

      1. Overall goals

      2. Pricing goals

         a. Production costs

         b. Forecast prices

         c. Determine acceptable price

         d. Write down objectives

         e. Monitor prices and outlook

INFORMATION SHEET

IV. Popular Alternatives in Marketing Grains

- A. Sell futures at planting time or any time until harvest
- B. Sell to an elevator at a fixed price any time before harvest
- C. Sell at harvest
- D. Store grain on the farm and sell futures
- E. Store grain in an elevator and sell futures
- F. Store grain on the farm or elevator for later sale
- G. Feed grain to livestock either with or without selling livestock futures contracts

V. Factors to Consider When Developing a Grain Marketing Plan

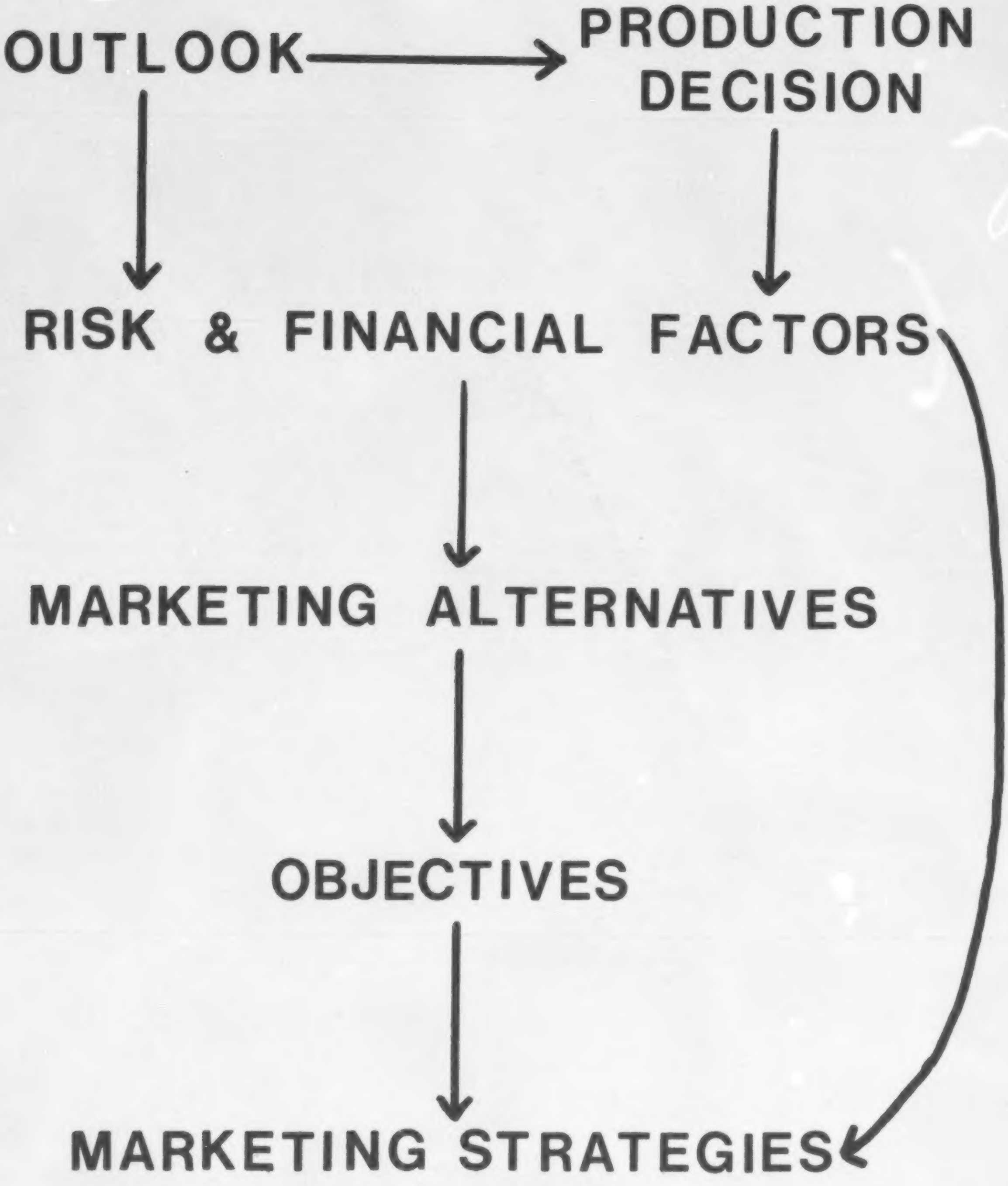
- A. Know production costs
- B. Determine how much production to price
- C. Analyize the cash flow and financial considerations
- D. Judge cash bid
- E. Judge contract bid
- F. Judge hedging possibilities- Type of hedger you will be
- G. Storage decisions
- H. Judge market strength
- I. Keep up to date
- J. Sell as market goes up- do not to try to hit it market high only
- K. Sell on narrow basis and keep when basis is wide
- L. Store as long as storage is paid- then buy on the board if still want to take advantage of upward market
- M. Develop marketing plan and write it down
- N. Set up a plan and also have a contengent plan

INFORMATION SHEET

VI. Develop a Marketing Cash Flow Plan Based on Individual Situations (Assignment Sheet #1)

VII. Develop a Grain Marketing Plan Based on Individual Situations (Assignment Sheet #2)

MARKETING PLAN



OUTLOOK

PRODUCTION DECISION

RISK & FINANCIAL FACTORS

MARKETING ALTERNATIVES

OBJECTIVES

MARKETING STRATEGIES

MARKETING

UNIT VII

ASSIGNMENT SHEET #1: Marketing Plan Cash Flow

Determine the net cash flow per month for wheat with the following assumptions:

a) General purpose farm with 100 acres of wheat

b) An average yield of 30 bushels per acre

c) The wheat can be sold for cash or contract for $3.85 with delivery in July

d) The cost of production is $3.50 a bushel

e) The futures prices are $4.00 in July, $4.15 in September, $4.23 in December

Fill in the blanks with proper information

1. Total bushels________________
2. Gross Income________________

f) The storage costs are 2½¢ per bushel monthly

g) Crop is planted on September 20- Total cost per acre to date includes:

Labor = $5.00

Seed = $4.00

Fertilizer = $9.00

Fuel & oil = $9.00

Repairs = $6.00

Taxes = $4.00

Machinery costs = $6.00

Interest on Land = $36.00

Capital purchase-
Replace old machinery = $12.50

h) On planting date you decide to go in a forward contract ½ of your total estimated production at $3.85

i) As the year progresses you determine that the crop looks about average. In March you decide to top dress the wheat. Cost to top dress would total $6.00 per acre. You also have the opportunity to forward contract the remaining wheat at $3.75 for delivery in August. You decide to sell ½ of your estimated total production. Assume that you have had two other sources of income.

ASSIGNMENT SHEET #1

j) Average interest rate for the season is 15%

k) In July you harvest the wheat. Remaining cost to harvest amounted to $.25 a bushel. Total cost of production is $3.50. You decide to sell the remaining bushels at a cash price of $3.70. Your average is 30 bushels per acre.

l) You have no previous crops to sell or other assets to sell. All money will have to be borrowed.

MARKETING

UNIT VII

ASSIGNMENT SHEET #1: Marketing Plan Cash Flow

QUESTIONS

Fill in the blanks with the right answer.

1) Total Bushels______________

2) One half of total production______________

3) Total cost of production at planting time______________per bushel

4) Gross income when forward contract in September______________

5) Net cash flow in September______________

6) Total cost topdress______________

7) Income from sale in March______________

8) Interest charge on cost from September to March (6 months)________

9) Total cost from September to March (6 months)______________

10) Net cash flow in March______________

11) Running balance total in March______________

12) Income from sale in July (cash)______________

13) Total cost to harvest from March to July______________

14) Interest charge from March to July (4 months)______________

15) Total cost of production from March to July (4 months)____________

16) Net cash flow in July______________

17) Running balance total in July______________

MARKETING

UNIT VII

ASSIGNMENT SHEET #1: Marketing Plan Cash Flow

ANSWERS TO QUESTIONS

1. 3,000
2. 1,500
3. $3.05
4. $5,775
5. - $3,375
6. $600
7. $2,812.50
8. $433.15
9. $1033.15
10. $1779.35
11. - $1,595.65
12. $2,775
13. $750
14. $80
15. $830
16. $1,945
17. + $349.35

MARKETING

UNIT VII

ASSIGNMENT SHEET #1: Marketing Plan Cash Flow

	Jan.		Feb.		March		April		May	
**	P	A	P	A	P	A	P	A	P	A
Grain to Sell										
Total Bushels										
Contracted Price										
Gross Income										
Less: Cost of Prod.										
Net Cash Flow										
Running Balance										

Grain to Sell										
Total Bushels										
Contracted Price										
Gross Income										
Less: Cost of Prod.										
Net Cash Flow										
Running Balance										

Grain to Sell										
Total Bushels										
Contracted Price										
Gross Income										
Less: Cost of Prod.										
Net Cash Flow										
Running Balance										

** P = Projected
A = Actual

ASSIGNMENT SHEET #1: Marketing Plan Cash Flow

June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
P	A	P	A	P	A	P	A	P	A	P	A	P	A

MARKETING

UNIT VII

ASSIGNMENT SHEET #2: Break Even Price for Wheat

Determine the break even price for wheat with the following assumptions:

Use the same assumptions as Assignment Sheet #1, except in this case you make no sales until after harvest. You have decided that you will sell 25% of your total production at the minimum selling price, and 25% of the remaining for each 5¢ increase in the price over the cost production.

Note: Those who try to sell at the high usually sell in the lower half of the price range. Sell when there is a profit.

Fill in the answers for the following questions:

1) What is the cost of production?

2) What is the cost of storage?

3) What is the profit margine?

4) How many bushels will you sell at the minimum selling price?

5) How many bushels will you sell if the price goes up 5¢ in the first month with no storage charges?

6) How much price increase will you have to have with two months storage charge to sell the remaining production?

MARKETING

UNIT VII

ANSWERS TO ASSIGNMENT SHEET #2

1. $3.50
2. 2.5 cents per month
3. none given in this case
4. 750 bushels
5. 750 bushels
6. 5¢ storage plus 15¢ (5¢ = 25% sales) = $.20

MARKETING

UNIT VII

TEST

1. Name four considerations of any marketing plan.

   A.

   B.

   C.

   D.

2. List four steps to follow when developing a marketing strategy.

   A.

   B.

   C.

   D.

3. List five factors which shape one's marketing strategy.

   A.

   B.

   C.

   D.

   E.

TEST

4. Name five possible alternatives that a farmer can use to market grain.

   A.

   B.

   C.

   D.

   E.

5. List eight factors to consider when developing a grain marketing plan.

   A.

   B.

   C.

   D.

   E.

   F.

   G.

   H.

TEST

6. Develop a personal marketing-cash flow marketing strategy.

7. Develop a personal grain marketing plan for your own use.

MARKETING

UNIT VII

ANSWERS TO TEST

1. Any of the following:

   a. production costs
   b. cash flow
   c. production risks
   d. expected returns
   e. risk preference

2. Any of the following:

   a. outlook
   b. production decisions
   c. risk and financial factors
   d. marketing alternatives
   e. objectives

3. Any of the following:

   a. risk
   b. pricing and marketing objectives
   c. overall goals
   d. pricing goals
   e. production costs
   f. forecast prices
   g. determine acceptable price
   h. write down objectives
   i. monitor prices and outlook

4. Any of the following:

   a. sell futures at planting time or any time until harvest
   b. sell to an elevator at a fixed price anytime before harvest
   c. sell at harvest
   d. store grain on the farm and sell futures
   e. store grain in an elevator and sell futures
   f. store grain on the farm or elevator for later sale
   g. feed grain to livestock either with or without selling livestock futures contracts

ANSWERS TO TEST

5. Any of the following:

   a. know production costs
   b. determine how much production to price
   c. analyze the cash flow and financial considerations
   d. judge cash bid
   e. judge contract bid
   f. judge hedging possibilities- type of hedger you will be
   g. storage decisions
   h. judge market strength
   i. keep up to date
   j. sell as market goes up- do not to try to hit it market high only
   k. sell on narrow basis and keep when basis is wide
   l. store as long as storage is paid- then buy on the board if still want to take advantage of upward market
   m. develop marketing plan and write it down
   n. set up a plan and also have a contengent plan

6. Complete to the satisfaction of the instructor

7. Complete to the satisfaction of the instructor

TAX MANAGEMENT

UNIT I

INCOME TAX MANAGEMENT

TERMINAL OBJECTIVES

Upon completion of this unit, students will be able to explain the purpose of tax management, describe the tax accounting methods, as well as how to utilize investment credit. The students will be able to utilize the tax management tips and income averaging, as well as identify the main sources of updated tax information. The objective will be considered achieved by completing the assignment sheets and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms with definitions associated with income tax management.
2. Explain the purpose of tax management.
3. Describe the advantages of three different tax accounting methods.
4. Explain how investment credit can be used to the farmer's tax advantage.
5. List ten of the tax management tips.
6. Demonstrate the income averaging technique. (Assignment Sheet #1)
7. List five tax management strategies which can be used to reduce the income tax estimate.
8. List four persons or places from which tax advice or information can be obtained.
9. Calculate the correct amount of investment tax credit. (Assignment Sheet #2)

TAX MANAGEMENT

UNIT I

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets, and develop example data as required
3. Provide students with the pamphlet, "Tax Management for Farmers", and "Your Federal Income Tax"
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Demonstrate procedures for working problems contained in Assignment Sheets by supplying complete examples
7. Give Test
8. Assist students in formulating specific plans as how to acquire competent income tax management advise

Students:

1. Read Objectives
2. Study Information Sheets
3. Demonstrate procedures for working problems contained in Assignment Sheets
4. Take Test
5. Implement a specific plan as how to acquire competent income tax management advise

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Assignment Sheets
   - #1 - Income Averaging
   - #2 - Investment Tax Credit
4. Answers to Assignment Sheets
5. Test
6. Answers to Test

References:

1. Kansas Farm Management Handbook, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.
2. Kansas Farm Account Book, Department of Economics, Cooperative Extension Service, Kansas State University, Manhattan, KS.
3. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service, Ohio State University.
4. Your Federal Income Tax, U.S. Treasury Department, Internal Revenue Service, Publication 17.
5. Farmer's Tax Guide, U.S. Treasury Department, Internal Revenue Service, Publication 225.
6. Doane's Tax Guide for Farmers, Doane's Agricultural Service.

Optional Teaching Aids:

1. Teaching Taxes Program, Teacher's Guide, U.S. Treasury Department, Internal Revenue Service, Publication 19.
2. Farm Edition, U.S. Treasury Department, Internal Revenue Service, Publication 19.

   (NOTE: The Internal Revenue District offices have several tax films which can be borrowed on request as well as a free supply of numberous publications.)

TAX MANAGEMENT

UNIT I

INFORMATION SHEET

I. Terms and Definitions

A. Market Livestock - Animals raised on the farm primarily for sale.

B. Purchased Livestock - Animals bought for resale.

C. Assets - Items or resources owned.

D. Farm Income - The income flow received from the sale of crops and livestock and their products.

E. Other Farm Income - The income flow to the farm received from activity other than the sale of crops and livestock products. (Examples: Machine Hire, Government Payments, Patronage Dividends, Mineral Royalties).

F. Depreciation - The decline in value of an asset due to such causes as wear and tear, action of elements, obsolescence, and inadequacy.

G. Salvage Value - Value of an asset at the end of its useful life.

H. Tax Basis - The dollar amount used to compute depreciation.

I. Self-employed - A person who is operating his own busines..

J. Schedule F - A tax form used along with the 1040 form to complete farm income and expenses.

K. Ad Volorem Tax - Assessment taxes against real property, personal property, and public service property.

L. Income Averaging - Permits the taxpayer who receives an unusually large amount of income in one year, to be taxed on this income after it has been diminished by being averaged with four previous lower income years.

II. Purpose of Tax Management

Tax Management is an absolutely necessary part of any good farm business management program. The terminal objective of good farm income tax management is to minimize income taxes, while simultaneously maximizing after-tax income. Thus, farm managers must have a knowledge of, or be advised of, the tax consequences of farm business decisions made throughout the year. If you manage a farm you do not need to be a

INFORMATION SHEET

tax expert, but you must be knowledgable enough about taxes to recognize the tax consequenses of a pending farm business decision and thus know when to request advice from a tax consultant.

III. Tax Accounting Methods and Their Advantages and Disadvantages (IRS recognizes only cash and accrual methods)

A. Cash Method - Farm income is reported in the year which cash or its equivalent is received from the sale of produce, property, or for services performed. Any deductions for farm expense items are made in the year in which they are paid out.

1. Advantages

a. Most simple tax accounting method, since inventory records are not necessary.

b. More flexible method, as you can control when to incur income and deduct expenses.

c. More easily understood because calculations are based on cash flow rather than projected inventory values.

2. Disadvantages

a. Income may be erratic - An unusually good year can balloon income into a higher tax bracket.

b. Allowable deductions and exemptions may be lowered in low income years.

B. Accrual Method - Farm income is reported on all sales made during the year, regardless of when the payment is received. Also included are the changes in inventory values of all livestock, crops and supplies on hand and not sold at the end of the year, and all the farm miscellaneous income. (See page 15, Kansas Farm Account Book)

1. Advantages

a. Levels out farm income without year end manipulation.

b. Defers cost of farm production until the product's sales income is received.

c. Farm management supervision is increased due to the requirement of more accurate record keeping.

2. Disadvantages

a. Records may become complex and time consuming.

b. More difficult to understand because calculations are based on projected inventory values, rather than actual cash flow dollars.

c. The actual cash position is difficult to determine.

C. Modified Accrual - (This method is not recognized by the Internal Revenue Service and thus more commonly used when developing non-tax related income statements)
As the name implies, this method is merely a combination or hybrid of the "cash method" and the "accrual method". This combination can range from 99% cash method and 1% accrual, or to 1% cash method and 99% accrual method. The most common use of this method in farm income tax situations is to calculate farm employer's payroll tax liability expenses, (FICA and federal withholding) on the accrual basis, and all other farm income and expenses on the cash basis.

1. Advantages

   a. Allows farmer flexibility so as to develop a more accurate representation of income and expenses and thus, farm income.

2. Disadvantages

   a. More difficult to understand because of complex records and calculations.

   b. Risk is involved in its use because IRS does not recognize it as an established method, although it is accepted in some limited situations.

IV. Investment Tax Credit

A. Probably the most effective tax management tool of all is the 10% investment credit, because it reduces tax on a dollar-for-dollar basis. If you acquire new or used depreciable property such as machinery, equipment, or breeding livestock for use in your farm business, you probably qualify for the investment credit. In order to qualify, the property must be depreciable, must have a useful life of at least 3 years and must be placed in service during the year. However, the property must have an expected useful life of 7 years or more to qualify for the 10% credit on the entire investment. If the useful life is 5 or 6 years, only two-thirds of the investment qualifies for the credit. For property with a useful life of 3 or 4 years, the credit is allowed on only one-third of the investment. The useful life used for computing the investment credit must be the same as the life used for calculating depreciation.

B. Breeding Livestock - All purchased dairy or breeding livestock, except horses, are eligible for investment credit. However, a special rule states that if substantially identical livestock have been sold during a one-year period beginning 6 months before other livestock are acquired, the cost of the acquired livestock is to be reduced by the amount realized on the sale of the identical livestock. For example, if a farmer sells breeding cattle for $10,000, and within 3 months acquires other substantially identical breeding cattle for $15,000, the amount qualifying for investment credit would be $5,000. For purposes of investment credit, breeding or dairy livestock would be considered as new property if the animals had not been used for breeding or dairy purposes before they were purchased. In a case where the animals had already been used for breeding or dairy purposes before the time of purchase, the animals would be considered as used property for investment credit purposes.

V. Tax Management Tips

A. To spread income and reduce taxes, pay reasonable wages to your children for farm work actually done by them, so long as there is a true employer-employee relationship. Assign definite jobs or responsibilities, agree on wages and pay them regularly by check as you would any other employee. Wages paid by parents are not subject to social security tax until the child reaches age 21. Neither are they counted on the child's social security record.

B. A child, under 19 or regularly enrolled in school 5 months or more in the year or in an accredited on-farm training program, can earn over the personal exemption. The parent can also receive an exemption for the child as a dependent as long as he pays for over one-half of the child's support. This makes possible two personal exemptions, one by the child if he earns over the exemption and files his own return, and the second as a dependent of his father. An individual's total tax-free earnings thus may be increased.

C. An individual's wages are not subject to withholding of federal income tax if he or she certifies to his or her employer that he or she expects to have no federal income tax liability for the current year and had no income tax liability for the preceding year.

D. Give income producing property to children: that is, land, cattle, machinery, and let them report income from their work and capital. Family partnerships and farm corporations through stock transfers are sometimes used to do this. It is another way to spread family income over the lower brackets. Remember, gifts and partnerships must be legally sound to achieve tax savings.

E. If you are age 63 or 64, postpone income to age 65 to take advantage of the double personal exemption. Persons approaching retirement, however, may want to maintain income as near as possible to the maximum for social security in that year.

INFORMATION SHEET

F. At retirement, plan for more income from rents, dividends, interest, and pensions which qualify for the retirement income credit. This may save income tax as earned income is replaced by investment income.

G. Do not hold breeding stock used for production of market livestock too long. By selling sows after only one or a few litters, a higher percentage of hog sales will qualify for capital gain treatment over a period of years and reduce taxes.

H. Buy machinery and equipment in years of high income and take the additional 20% first year depreciation in addition to the regular depreciation allowable.

I. If you are selling timber, be sure to handle the sale so the gain can be reported as a capital gain. (See the Farmer's Tax Guide for details on different methods of selling timber).

J. Manage sales of farm machinery, equipment, land and breeding and dairy stock. These can result in capital gains or ordinary losses. Cattle and horses must be held for 24 months or more, other livestock for 12 months or more, to qualify for capital gains treatment. Other depreciable items must be held more than 9 months.

K. Plan personal deductions. Many medical expenses or contributions that are normally spread over two years can be paid in one year and itemized as deductions. In the next year, the standard deduction may be taken if higher than actual deductions. Be sure to choose the largest of the standard deduction, or your actual itemized deductions.

L. Plan to have enough income to use up personal deductions and exemptions that are allowed. (See Smith example on page 6, Farmer's Tax Guide).

M. Avoid wide fluctuations in income from one year to the next. (See Jones example on page 6, Farmer's Tax Guide).

N. Understand the effect of rapid or accelerated depreciation that is permissible on newly acquired machinery, equipment and improvements. Decide whether to recover costs quickly or spread them out against farm production over a longer period.

O. Installment sales of property can be used to spread income over a period of years and thus avoid high income in one year.

P. Check for loss years in the past. Is there an unused net operating loss deduction? If you file for a refund, be sure to have records to substantiate your claim.

INFORMATION SHEET

Q. Ten percent investment credit available on qualified property, placed in service after January 21, 1975.

R. Several alternative courses of action are available to defer payment of taxes. Land development costs can be used as current expenses up to certain limits, additional first year depreciation and accelerated methods of depreciation are other examples.

S. Filing a tax estimate by January 15 relieves the pressure on farm tax consultants and improves the completeness and accuracy of tax returns, generally saving the taxpayer taxes. In addition, it frees records for use with lenders to establish farm lines of credit early in the year.

T. Gifts of farm products to charity: a cash basis taxpayer can no longer take a fair market value deduction since the raised products have a zero cost basis. Therefore, there is nothing to deduct.

U. To insure a record of all income and expenses, have a checking account in which to deposit all receipts and to pay all bills.

V. Be sure that CCC loans are not counted as income twice (in one year when borrowed and next year when crop is sold). Good inventory records will help insure this does not happen.

W. If you are using the cash method, deduct cost of purchased livestock lost, strayed, stolen, or which died during the year.

X. If you are using the accrual method, deduct all purchases of livestock. Make a "livestock number check" to see that the total number purchased and born in the beginning inventory equals the total number sold, died and butchered in the ending inventory.

Y. Deduct the farm share of all auto and truck expenses, including licenses, insurance, etc.

Z. Deduct as many auto, utilities, telephone, etc., expenses as actually used in the farm business (half is not enough in many cases).

AA. Take allowable depreciation on improvements, machinery, equipment; and on purchased breeding, dairy and draft animals.

BB. Keep records to insure deduction of easily overlooked items such as farm magazines, farm organization dues, bank service charges, business trips, portion of dwelling used for farm business, household supplies used for hired help and cash outlay to board hired workers.

CC. Itemize on bank deposit slips all gifts, borrowings, savings bonds cashed, etc., so that they will not be considered taxable income.

INFORMATION SHEET

DD. Keep records of all medical, dental and hospital bills, including premiums for accident and health insurance.

EE. Establish a charge account at a hardware store, elevator or other places where considerable business is done during the year. Pay account by check upon receipt of monthly statements. This prevents omitting many small items which might otherwise be paid by cash and receipts lost.

FF. Keep exact records of date of purchase, cost and date of sale on all items purchased for resale.

GG. Pay bills by check whenever possible. Record all cash expenditures at once in an account book. Always get "receipts" for farm expenses paid by cash. Obtain a bank statement each month and check it against the farm account book.

HH. Do not include in income any indemnity for diseased animals if payment has been or will be used to buy "like of similar" animals within two years for replacements.

II. Withhold and deduct social security tax paid in wages of hired help. When withheld tax plus an equal amount representing your employer tax amounts to $200, they must be deposited currently.

JJ. Do not report as income, capital gains on the sale of your dwelling if you plan within 18 months to build and occupy another dwelling that will cost as much or more than the selling price of your present dwelling.

KK. Keep all "paid receipts, invoices, cancelled checks, etc., for at least five years, including checks in payment of income taxes. Receipts for purchase of items on which investment credit was taken should be kept for seven years (or until property is disposed of) as evidence of purchase or cost of improvements for as long as you hold the property.

LL. Remember that if you have income subject to tax, every dollar of cost not deducted will result in unnecessary income taxes.

VI. Income Averaging

A. Who is Eligible?

The income averaging method of computing tax is available only to individuals. Corporations, trusts, and estates do not qualify. Two tests must be met to qualify for income averaging. One test relates to citizenship or residence and the other test relates to the taxpayer's support.

INFORMATION SHEET

To be eligible to compute tax by the income averaging method, the taxpayer must have been a citizen or a resident of the United States throughout the computation year and the base period years. The computation year is the year for which the tax is being computed and the four tax years immediately preceding the base period years. The tax payer must have furnished 50 percent or more of his support during each of the four base period years. If a joint return is filed, both the husband and wife must meet the support test. There are some exemptions to the support test. They are listed in the Internal Revenue Service Publication No. 506, "Computing Your Tax Under the Income Averaging Method".

B. Basically, income averaging permits are part of an unusually high taxable income to be taxed in lower brackets, thus reducing the overall amount of tax due. The first part of the taxable income up to 120 percent of the average of the base period income (four previous years) is taxed at normal tax rates. The averageable income, which is the taxable income for the computation year that is above the 120 percent level, is then all taxed at the same rate that the first one-fifth of it would normally be taxed. In effect, this lowers the tax bracket for the upper part of the taxable income and provides some tax saving.

The following five-step approach can be used to determine if income averaging will be effective in lowering taxes:

1. Estimate taxable income for the computation year. Taxable income is adjusted gross income minus deductions and personal exemptions.
2. Add taxable income for the four previous years.
3. Divide the answer to step #2 by the number four to determine a four-year base period average.
4. Multiply the answer in step #3 by the number 1.2.
5. Subtract the answer on step #4 from the taxable income of the tax computation year, step #1. This amount is subject to income averaging. If this total is more than $3,000, the income averaging method can be used.

(See Assignment Sheet #1)

INFORMATION SHEET

VII. Tax Management Strategies

- A. Periods When Income is High
    1. Pay debts
    2. Hire children
    3. Purchase needed machinery and livestock
    4. Hold crops and livestock off market
    5. Use maximum initial depreciation
    6. Make needed repairs
    7. Use income averaging
    8. Do extra conservation work
- B. Periods When Income is Low
    1. Use slower depreciation

       (NOTE: Method of depreciation on same item must remain consistent from one year to another).
    2. Postpone debt payments
    3. Sell crops and livestock
    4. Collect accounts receivable
    5. Do additional custom work

VIII. Points of Contact to Acquire Farm Tax Management Advise or Information

- A. Federal Internal Revenue Service Department, 412 S. Main, Wichita, KS (Toll Free - Dial 1-800-362-2190)
- B. (Reliable) Local Tax Accountant
- C. Kansas Area Farm Management Extension Specialist
- D. Agriculture Extension Agent
- E. Local Attorneys with Tax Training
- F. Private Agencies Assisting Other Farmers
- G. Agriculture Consultant Firms

TAX MANAGEMENT

UNIT I

ASSIGNMENT SHEET #1: Income Averaging

Demonstrate the income averaging technique for the example situation shown below. Also see Information Sheets SI U1-10 and SI U1-11 concerning income averaging.

1. A farmer extimates that his taxable income for the tax computation year was $20,000. The taxable income for his previous four years were: $8,000, $7,000, $5,000, and $4,000.

   a. What was the taxable income for the computation year?

      ____

   b. What was the taxable income for the four previous years?

      ____

   c. What is the four year base period average? ________________ ÷ 4 = ________________

   d. What was the farmer's averageable income for the tax computation year?

      Step 1: ________________ X 1.2 = ________________

      Step 2: ________________ - ________________ = ________________

      Answer: ________________

   e. Was the farmer's averageable income greater than $3,000?

      ____

   f. Can the income averaging method be used for this farmer's situation? ________________

TAX MANAGEMENT

UNIT I

ASSIGNMENT SHEET #2: Investment Tax Credit

Calculate the correct amount of investment tax credit for the example problem shown below. Also see Information Sheets SI U1-6 and SI U1-7 concerning investment tax credit.

1. A beef farmer purchases 25 "open" yearling replacement heifers on June 1 for $1,000 per head. The same farmer had sold 10 "open" yearling cull heifers on May 1 of the same year for $700 per head. What investment tax credit could be claimed by the farmer on his purchase of the heifers?

TAX MANAGEMENT

UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

1. a. \$20,000

   b. \$8,000 + \$7,000 + \$5,000 + \$4,000 = \$24,000

   c. \$24,000 ÷ 4 = \$6,000

   d. Step 1: \$6,000 X 1.2 = \$7,200
      Step 2: \$20,000 - \$7,200 = \$12,800
      Answer: \$12,800

   e. yes

   f. yes

Assignment Sheet #2

The farmer sold 10 "open" yearling cull heifers for \$7,000 and within 3 months acquired 25 substantially identical "open" yearling heifers for \$25,000; the amount qualifying for investment credit would be \$25,000 - \$7,000 = \$18,000. Ten percent of \$18,000 is \$1,800.

TAX MANAGEMENT

UNIT I

TEST

1. Match the terms on the right with their proper definitions:

____a. Assessment taxes against real property, personal property and public service property.

____b. Items or resources used.

____c. The decline in value of an asset due to such causes as wear and tear, action of elements, obsolescence and inadequacy.

____d. A person who is operating his own business.

____e. Animals raised on the farm primarily for sale.

____f. The income flow to the farm received from activity other than the sale of crops and livestock products.

____g. A tax form used along with the 1040 form to complete farm income and expenses

____h. The dollar amount used to compute depreciation.

____i. Animals bought for resale.

____j. The income flow received from the sale of crops and livestock and their products.

____k. Permits the taxpayer who receives an unusually large amount of income in one year, to be taxed on this income after it has been diminished by being averaged with four previous lower income years.

____l. Value of an asset at the end of its useful life.

1. Market Livestock
2. Purchased Livestock
3. Ad Volorem Tax
4. Assets
5. Depreciation
6. Salvage Value
7. Income Averaging
8. Farm Income
9. Self-employed
10. Tax Basis
11. Schedule F
12. Other Farm Income

TEST

2. Explain the purpose of tax management.

3. Describe the advantages of three different tax accounting methods.
    a. Cash Method -
    b. Accrual Method -
    c. Modified Accrual Method -

4. Explain how investment credit can be used to the farmer's tax advantage.

5. List ten of the tax management tips.
    a.
    b.
    c.
    d.
    e.
    f.
    g.
    h.
    i.
    j.

TEST

6. Demonstrate the income averaging technique for the example situation shown below:

   A farmer estimates that his taxable income for the tax computation year was $30,000. The taxable income for his previous four years were: $18,000, $17,000, $15,000, and $14,000.

   a. What was the taxable income for the computation year?

   ____

   b. What was the taxable income for the four previous years?

   ________________ + ________________ + ________________ +

   ________________ = ________________

   c. What is the four year base period average?

   ________________ ÷ 4 = ________________

   d. What was the farmer's averageable income for the tax computation year?

   Step 1: ________________ X 1.2 = ________________

   Step 2: ________________ − ________________ = ________________

   Answer: ________________

   e. Was the farmer's averageable income greater than $3,000?

   ____

   f. Can the income averaging method be used for this farmer's situation? ________________

7. List five tax management strategies which can be used to reduce the income tax estimate.

   a.

   b.

   c.

   d.

   e.

8. List four persons or places from which tax advice can be obtained.

   a.

   b.

   c.

   d.

TEST

9. Calculate the correct amount of investment tax credit.

A dairy farmer purchases 30 "open" yearling replacement heifers on June 1 for $1,100 per head. The same farmer had sold 15 "open" yearling cull heifers on May 1 of the same year for $500 per head.

TAX MANAGEMENT

UNIT I

ANSWERS TO TEST

1. 3 a.
   4 b.
   5 c.
   9 d.
   1 e.
   12 f.
   11 g.
   10 h.
   2 i.
   8 j.
   7 k.
   6 l.

2. Minimize income taxes while simultaneously maximizing after-tax income.

3. a. Cash Method -

   1. Most simple tax accounting method, since inventory records are not necessary.
   2. More flexible method, as you can control when to incur income and deduct expenses.
   3. More easily understood because calculations are based on cash flow rather than projected inventory values.

   b. Accrual Method -

   1. Levels out farm income without the year end manipulation.
   2. Defers cost of farm production until the product's sales income is received.

ANSWERS TO TEST

3. Farm management supervision is increased due to the requirement of more accurate record keeping.

c. Modified Accrual -

1. Allows farmer flexibility so as to develop a more accurate representation of income and expenses, and thus, farm income.

4. If you acquire new or used depreciable property such as machinery, equipment, or breeding livestock for use in your farm business, you probably qualify for the investment credit. In order to qualify, the property must be depreciable, must have a useful life of at least three years and must be placed in service during the year. However, the property must have an expected useful life of seven years or more to qualify for the 10% credit on the entire investment. If the useful life is five or six years, only two-thirds of the investment qualifies for the credit. For property with a useful life of three or four years, the credit is allowed on only one-third of the investment. The useful life used for computing the investment credit must be the same as the life used for calculating depreciation.

5. Complete to the satisfaction of the instructor.

6. a. $30,000

b. $18,000 + $17,000 + $15,000 + $14,000 = $64,000

c. $64,000 ÷ 4 = $16,000

d. Step 1: $16,000 X 1.2 = $19,200

Step 2: $30,000 - $19,200 = $20,800

Answer: $20,800

e. yes

f. yes

7. A. Periods When Income is High

1. Pay debts

2. Hire children

3. Purchase needed machinery and livestock

ANSWERS TO TEST

7. A. 4. Hold crops and livestock off market
    5. Use maximum initial depreciation
    6. Make needed repairs
    7. Use income averaging
    8. Do extra conservation work
  B. Periods When Income is Low
    1. Use slower depreciation

       (NOTE: Method of depreciation on same item must remain consistent from one year to another.)
    2. Postpone debt payments
    3. Sell crops and livestock
    4. Collect accounts receivable
    5. Do additional custom work

8. A. Federal Internal Revenue Service Department, 412 S. Main, Wichita, KS (Toll Free - Dial 1-800-362-2190)
  B. (Reliable) Local Tax Accountant
  C. Kansas Area Farm Management Extension Specialist
  D. Agriculture Extension Agent
  E. Local Attorneys with tax training
  F. Private agencies assisting other farmers
  G. Agriculture Consultant Firms

9. The farmer sold 15 "open" yearling cull heifers for $7,500 and within 3 months acquired 30 substantially identical "open" yearling heifers for $33,000; the amount qualifying for investment credit would be $33,000 - $7,500 = $25,500. Ten percent of $25,500 is $2,550.

TAX MANAGEMENT

UNIT II

RETIREMENT PROGRAMS

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to explain the purpose of social security taxes. The student will be able to demonstrate computation of social security taxes and explain the use of individual retirement programs. The student will be able to state when and how social security deposits for employees are due to the government and differentiate between the KEOGH and IRA retirement plans. The objective will be considered achieved by completing the assignment sheets and by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, the student will be able to:

1. Match terms with definitions associated with retirement programs.
2. Explain the purposes of social security and individual retirement programs.
3. Explain the differences in the social security tax deductions for employed persons and self-employed persons.
4. List four options for social security tax payments.
5. List two methods for the payment of social security taxes.
6. List one difference and one similarity between the KEOGH and IRA retirement plans for each of the participation, contribution, distribution, and funding categories.

TAX MANAGEMENT

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets and develop example data as required
3. Provide students with the pamphlets, "Farmers . . . How to Report Your Income for Social Security," "Social Security Information for Crew Leaders and Farmers," and "Farm Rental Income . . . Does it Count for Social Security Payments." (Other pamphlets also available)
4. Make Transparencies
5. Discuss Terminal and Specific Objectives
6. Discuss Information and Assignment Sheets
7. Arrange for a guest speaker with films on social security
8. Demonstrate procedures for working problems contained in Assignment Sheets by supplying complete examples
9. Assist student in formulating specific plans as how to acquire social security advice in the future
10. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Demonstrate procedures for working problems contained in the Assignment Sheets
4. Take Test
5. Implement a specific plan as how to acquire competent social security advice in the future

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Master

   TM 1 - Types of Social Security Payments
4. Assignment Sheet

   #1 - Calculate Social Security Tax Deductions
5. Answers to Assignment Sheet
6. Test
7. Answers to Test

References:

1. Farm Business Planning and Analysis Program and Teaching Units, Ohio Agriculture Education Curriculum Materials Service, Ohio State University.
2. "Financing Your Social Security Benefits" (551-36), "If You Become Disabled," (551-29). U.S. Department of Health, Education and Welfare. These are annual publications.
3. "If You Work While You Get Social Security Payments." U.S. Department of Health, Education and Welfare, Social Security Administration, 1977.
4. "Social Security," and Supplement to Social Security Handbook.
5. a. "Farmers . . . How to Report Your Income for Social Security."

   b. "Farm Rental Income . . . Does it Count for Social Security Payments?"

   c. "Social Security Information for Crew Leaders and Farmers."

   d. "If You're Self-Employed . . . Reporting Your Income for Social Security."

   e. "History of Social Security"

INSTRUCTIONAL MATERIALS

f. "Your Social Security Earnings Record."

g. "What You Have to Know About Social Security Income."

h. "Social Security Information for Young Families."

i. "When You Work at a Job."

j. "Estimating Your Social Security Retirement Check for Workers Who Reached 62 Before 1979."

k. "Estimating Your Social Security Retirement Check for Workers Who Reached 62 in 1979-83."

l. "Your Social Security Rights and Responsibilities."

m. "Your Social Security."

(These and many others available from your local Social Security Office, or U.S. Department of Health, Education and Welfare, Washington, D.C.: Government Printing Office)

6. "Tax Sheltered Retirement Plans on Farm Investments" North Central Regional Extension Publication No.55-1978.

TAX MANAGEMENT

UNIT II

INFORMATION SHEETS

I. Terms and Definitions

A. Social Security Act (as amended) - A piece of federal legislation which provides for: old age retirement, survivor's benefits, disability insurance, medicare, unemployment insurance, and public welfare. The latter two are administered by state or local governments.

B. Insured Party - A person who is employed in a "covered occupation" and who has been working and thus paying into the social security program for an accepted period of time, which is approximately ten years.

C. Social Security Tax - A payroll deduction required by law from employee and employer in the name of any person who wants to qualify for social security benefits. (The 1980 rates are 12.26% of each employee's first $25,900 of gross annual income.)

D. Quarter of Coverage - A three month period of time of employment during which an individual received $250 or more in wages and paid his social security taxes. Generally, a person must accumulate 40 such periods before he or she can receive benefits from the program.

E. Self-employed Coverage - Any individual who is self-employed and earns $1,000 or more gross annual income and pays his social security taxes, is considered "covered" for that year.

F. Farm Employee Coverage - Any farm employee who receives $250 wages, receives one "quarter" of coverage, with a maximum of four "quarters" of coverage per year, for over $1,000 in wages received.

G. Fully Insured - An individual that has paid social security taxes for a long enough period of years to become eligible to receive all of the various benefits if and when he or she qualifies. The number of years needed varies depending upon when a person reaches retirement age, but no one needs more than ten years.

H. Currently Insured - An individual that has social security credit for at least one and one-half years, within three years prior to their death, or retirement.

I. Cash Benefits - The monthly or lump sum payments made to "fully" or "currently" covered persons or their dependants upon that person's retirement, disablement or death.

INFORMATION SHEET

J. Wage Statement Request - A pre-printed form supplied by the national social security office in Baltimore, Maryland, which a person should use at least once every three years to check his or her record as to the amount of money which has been paid into his or her social security account.

K. Escalator Factor - A cost of living index adjustment to social security benefits which is implemented each June, if there has been more than a 3% rise in price levels.

L. Workmen's Compensation - A program sponsored by states through which employer's pay in premiums, and the job-related employee's medical bills and short-term disability payments are paid out. (Only for on the job accidents or work related illnesses.)

M. Public Welfare - Financial aid supplied by state and local governments to persons in the categories: old age, needy blind, needy disabled, families with dependent children.

N. Unemployment Insurance - A program sponsored by states through which an unemployed person can receive a monthly payment based on the income rate he or she had earned prior to unemployment. The period of payments is usually short, and a person can generally only receive payment if he or she is laid off.

O. KEOGH Plan - A retirement program for persons who have their own trade of business and who are subjected to social security self-employment tax.

P. Individual Retirement Plan (IRA) - A program where individuals may contribute to their own retirement fund provided they are not "active participants" in other retirement programs exclusive of social security.

II. Social Security and Individual Retirement Purposes

A. To protect people from destitution in old age, provide benefits for survivors, economically protect disabled workers, provide medical care for those over sixty-five years of age, and in general, protect people from economic disaster during periods of unemployment.

B. To enable the taxpayers to design a retirement plan to fit their own unique situation and provide tax shelter benefits.

INFORMATION SHEET

III. Social Security Tax Deductions

A. If you are employed, whether full or part time, you and your employer each pay an equal share of social security contributions.

	Year	Total %	Employee %	Employer %
Social Security Contribution Rates	1980	12.26	6.13	6.13
	1981	13.30	6.65	6.65
	1982	13.40	6.70	6.70
	1985	14.10	7.05	7.05
	1986	14.30	7.15	7.15
	1990	15.30	7.65	7.65

B. If you are self-employed, you pay contributions for retirement, survivor's, and disability insurance at a rate about equal to 1½ times the employee rate. The hospital insurance contribution rate is the same as for the employer and the employee.

	Year	Total %
Social Security Contribution Rates	1980	8.10
	1981	9.30
	1982	9.35
	1985	9.90
	1986	10.00
	1990	10.75

IV. Social Security Tax Payment Options

A. Use net farm earnings on Form 1040 Schedule F as the basis for the social security payment. (Only acceptable method if net farm earnings were over $1600.)

B. May use two-thirds of gross earnings between $600 and $2400 if the net earnings were less than $400.

C. May use two-thirds of gross earnings between $600 and $2400 of the net earnings if they are $400 or more.

D. If the gross farm income is over $2400 and net earnings are not more than $1600 the payments can be on either $1600 or the actual net farm earnings.

INFORMATION SHEET

V. Methods for the Payment of Social Security Taxes to the Government

A. If you are employed, your contribution is deducted from your wages each pay day. Your employer matches your payment and sends the combined amount to the Internal Revenue Service.

B. If you are self-employed and your net earnings are $400 or more in a year, you must report your earnings and pay your self-employment contribution each year when you file your individual income tax return. This is true even if you do not own any income taxes.

VI. Comparison of KEOGH and IRA Retirement Plans

	KEOGH	IRA
A. PARTICIPATION		
1. Eligibility	1. Self employed persons must have income from personal services	1. Persons not covered by self-employment corporations or government.
2. Waiting period	2. Three years for a self-employed farmer.	2. None
3. Minimum age	3. No minimum age	3. No minimum age
B. CONTRIBUTIONS		
1. Limits	1. Lesser of $7500 or 15% of self-employed person's earned income.	1. Lesser of $1500 or 15% of earned income.
2. Final date for deductible contribution	2. Final date for filing tax for year, including extensions	2. 45 days after end of tax year.
3. Penalties	3. 6% cumulative each year on excessive contribution left in account	3. 6% cumulative, each year on excess contribution

INFORMATION SHEET

	KEOGH	IRA
4. Transfer of funds permitted	4.	4.
a. Into Plan	a. No	a. Yes
b. Out of Plan	b. Yes, within 60 days of distribution	b. Yes, within 60 days of distribution, no more than once in three years.
C. DISTRIBUTIONS		
1. Age for Distribution	1. Not before 59½, nore after 70½.	1. Not before 59½, nor after 70½.
2. Limits on Benefits	2. Lesser of $75,000 or 100% of average of high three years' earnings (for defined benefit plans.)	2. Not applicable.
3. Penalties Premature Distribution	3. 10% of funds withdrawn (or pledged) plus income taxes on amount withdrawn in year of withdrawal (voluntary contributions excepted.)	3. 10% of funds in the account plus income taxes in year distributed or pledged.
4. Taxing of Benefits		
a. Lump Sum	a. In year received. Special 10-year averaging formula available. That portion attributable to years of participation before 1974 may be treated as capital gain.	a. As ordinary income. Can use standard 5-year income averaging.
b. Annuity	b. As ordinary income in years received. Standard (5-year) income averaging applicable.	b. As ordinary income received. Standard (5-year) income averaging applicable.

INFORMATION SHEET

	KEOGH	IRA
D. FUNDING		
1. Alternatives	a. IRS-approved; Trust with bank, trust company, building and loan. Custodial account with bank or building and loan. Mutual funds, life insurance contracts, annuities, endowments. Special U.S. "retirement" bond.	a. IRS-approved: Account bank, savings and loan, credit union, others approved by IRS. Annuity - insurance company annuity or endowment contract. Special U.S. "retirement" bond.
	b. Can design own plan.	b. Can design own plan.

SI U2-11

Types of Social Security Payments

Types of Payments	Insured Status
This table shows the principal types of payments and the insured status needed for each.	
RETIREMENT	
Monthly payments to--	If you are--
*You as a retired worker and your wife and child	Fully insured.
Your dependent husband 62 or over	Fully insured.
SURVIVORS	
Monthly payments to your--	If at death you are--
*Widow 60 or over or disabled widow 50-59	Fully insured.
*Widow (regardless of age) if caring for your child who is under 18 or disabled and is entitled to benefits	Either fully or currently insured.
Dependent child	Either fully or currently insured.
Dependent widower 62 or over and disabled dependent widower 50-61	Fully insured.
Dependent parent at 62	Fully insured.
Lump sum death payment	Either fully or currently insured.
DISABILITY	
Monthly payments to--	If you are--
You and your dependents if you are disabled	Fully insured and if you meet work requirements.

Source: U.S. Department of Health, Education and Welfare, OSA1. 35, June 1977, pg. 10.

*Under certain conditions, payments can also be made to your divorced wife or surviving divorced wife.

TM 1

TAX MANAGEMENT

UNIT II

ASSIGNMENT SHEET #1: Calculate Social Security Tax Deductions

Calculate the social security tax deductions for the two employees shown below.

1. John Doe - Full-time Employee

Salary - $1400.00/month
Payday - 15th of each month

Employee Monthly Deduction ____________________
Employee Annual Deduction ____________________
Employer Monthly Payment ____________________
Employer Annual Payment ____________________
Total Social Security Payment for month ____________________

2. Jane Doe - Part-time Employee

Wage - $4.50/hr. flat rate
Payday - Weekly, Saturday a.m.
(This week, 33.4 hours)

Employee Weeks Deduction ____________________
Employer Weeks Payment ____________________
Total Social Security Payment for week ____________________

TAX MANAGEMENT

UNIT II

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1

1. 85.82
1029.84
85.82
1029.84
$ 171.64

2. 9.21
9.21
$18.42

TAX MANAGEMENT

UNIT II

TEST

1. Match the terms on the right to their proper definitions.

____a. A payroll deduction required by law from employee and employer in the name of any person who wants to qualify for social security benefits.

____b. An individual that has social security credit for at least one and one-half years within three years prior to their death, or retirement.

____c. Financial aid supplied by state or local governments to persons in these categories; old age, needy blind, needy disabled, families with dependent children.

____d. A piece of federal legislation which provides old age retirement, survivors' benefits, disability insurance, medicare, unemployment insurance, and public welfare. The latter two are administered by state or local governments.

____e. Any individual who is self-employed and earns $1000 or more gross annual income and pays his social security taxes, is considered "covered" for that year.

____f. A pre-printed form, supplied by the national social security office in Baltimore, Maryland which a person should use at least once every three years to check his or her record as to the amount of money which has been paid into his/her social security account.

____g. A three month period of time of employment during which an individual received $250 or more in wages and paid his social security taxes. Generally, a person must accumulate 40 such periods before he/she can receive benefits from the program.

1. KEOGH Plan
2. Quarter of Coverage
3. Cash Benefits
4. Unemployment Insurance
5. Insured Party
6. Farm Employee Coverage
7. Escalator Factor
8. Social Security Tax
9. Individual Retirement Plan (IRA)

TEST

____h. The monthly or lump sum payments made to fully or currently covered persons or their dependents upon that person's retirement, disablement, or death.

____i. A program sponsored by states through which an unemployed person can receive a monthly payment based on the income rate he/she had earned prior to unemployment. The period of payment is usually short, and a person can generally only receive payments if he/she is laid off.

____j. Any farm employee who receives $250 wages, receives one "quarter" of coverage, with a maximum of four "quarters" of coverage per year for over $1000 in wages received.

____k. A program sponsored by states through which employers pay in premiums, and the job related employee's medical bills and short-term disability payments are paid out.

____l. A cost of living index adjustment to social security benefits which is implemented each June, if there is has been more than a 3% rise in price levels.

____m. An individual that has paid social security taxes for a long enough period of years to become eligible to receive all of the various benefits if and when he or she qualifies. The number of years varies, depending upon when a person reaches retirement age, but no one needs more than ten years.

____n. A person who is employed in a "covered occupation" and who has been working and thus paying into the social security program for an accepted period of time, which is approximately ten years.

10. Currently Insured
11. Public Welfare
12. Fully Insured
13. Self-Employed Coverage
14. Wage Statement Request
15. Workmen's Compensation
16. Social Security Act

TEST

2. Explain the purpose of social security tax and individual retirement programs.

3. Calculate the social security tax deductions for the full-time employee, and the part-time employee from the example salaries shown below.

A. Bill Smith - Full-time Employee
Salary - $1,100/month
Payment - 1st of each month

Employee Monthly Deduction ____________
Employee Annual Deduction ____________
Employer Monthly Payment ____________
Employer Annual Payment ____________
Total Social Security Payment per month ____________

B. Mary Jones - Part-time Employee
Wages - $4.75/hr. flat rate
Payday - Weekly Saturday a.m.
(This week $23.75 hrs.)

Employee Weeks Deduction ____________
Employer Weeks Payment ____________
Total Social Security Payment per week ____________

4. List four options for social security tax payments.

5. List two methods for the payment of social security taxes.

6. List one difference and one similarity between the KEOGH and IRA retirement plans for each of the participation, contribution, distribution, and funding categories.

TAX MANAGEMENT

UNIT II

ANSWERS TO TEST

1.
___8___ a.
___10___ b.
___11___ c.
___16___ d.
___13___ e.
___14___ f.
___2___ g.
___3___ h.
___4___ i.
___6___ j.
___15___ k.
___7___ l.
___12___ m.
___5___ n.
___1___ o.
___9___ p.

2. To protect people from destitution in old age, provide benefits for survivors, economically protect disabled workers, provide medical care for those over 65 years of age, and in general, protect people from economic disaster during periods of unemployment.

3. To enable the taxpayer to design a retirement plan to fit his own unique situation and provide tax shelter benefits.

ANSWERS TO TEST

4. If you are employed, the employee and the employer pay an equal amount into social security. If you are self-employed, contributions for retirement, survivors, and disability insurance is made at about 1½ times the employee's rate. The hospital insurance charge is the same as the employer plus the employee contribution.

5. The four social security tax payment options are:

   a. Use net farm earnings on Form 1040 Schedule F as the basis for the social security payment. (Only acceptable method if net farm earnings were over $1600.)

   b. May use two-thirds of gross earnings between $600 and $2400 if the net earnings were less than $400.

   c. May use two-thirds of gross earnings between $600 and $2400 of the net earnings if they are $400 or more.

   d. If the gross farm income is over $2400 and net earnings are not more than $1600 the payments can be on either $1600 or the actual net farm earnings.

6. Any one similar and one different provision for the KEOGH and the IRA retirement plans from the following:

	KEOGH	IRA
a. Participation		
Similar	No minimum age	No minimum age
Different	Self-employed	Not self-employed
Different	3 yr. waiting period	No waiting period
b. Contribution		
Similar	6% penalty on excessive contribution transfer funds out after 60 days	6% penalty on excessive contribution transfer funds out after 60 days
Different	Lesser of $7500 or 15% of earned income	Lesser of$1500 or 15% of earned income
Different	Final date for filing tax for the year	45 days after the end of the tax year
Different	Cannot transfer funds	Can transfer funds

ANSWERS TO TEST

	KEOGH	IRA
c. Distribution		
Similar	Not before 59½ nor after 70½	Not before 59½ nor after 70½
Similar	10% penalty for premature distribution	10% penalty for premature distribution
Different	Limits of lesser of 75,000 or 100% of average of high three years of earning	Not applicable
Different	10 yr. averaging of funds available	5 yr. averaging of funds available
d. Funding		
Similar	IRS approved	IRS approved
Similar	Can design own plan	Can design own plan

RISK MANAGEMENT

UNIT 1

FARM INSURANCE

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to match terms associated with insurance to the proper definition. The student will be able to match the various types of liability, property, life and health insurance when given the correct definition and to select from a list the factors that influence rates for various kinds of insurance. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms associated with insurance to the proper definition.
2. Match the type liability insurance with the proper definition.
3. Match the basic auto coverages with the proper definition.
4. Interpret the liability limit of a 10-20-5 policy.
5. Select from a list the factors to consider when determining what coverages to buy for an automobile.
6. Select from a list those items that influence automobile insurance premiums.
7. List ways to save on automobile insurance.
8. Match the type property insurance with the correct definition.
9. Select from a list those items that influence cost of property insurance.
10. Name the basic rules to use when buying property insurance.
11. Distinguish between crop hail insurance and federal crop insurance.
12. Match the kind of life insurance policy with the characteristics of each kind.

SPECIFIC OBJECTIVES

13. Discuss in writing instances when a family income life insurance policy would be needed most.

14. Select from a list the factors that determine the amount of life insurance needed.

15. Match the kind of health insurance with the proper definition.

16. Select from a list, the features of workmen's compensation insurance.

17. Select from a list the kinds of work covered by social security, and who must pay social security tax.

18. Select from a list the benefits which are paid from social security funds.

19. Select from a list the reasons social security payments may stop.

RISK MANAGEMENT

UNIT 1

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparency
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheet
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Master

   TM 1 - Social Security--Where the Money Comes From
4. Assignment Sheet

   #1 - Evaluating Your Family Insurance Program
5. Test
6. Answers to Test

INSTRUCTIONAL MATERIALS

References:

1. A Teacher's Guide for Insurance: A Business and Office Curriculum Project. Department of Vocational Education, Colorado State University, Fort Collins, Colo., 1971.

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3. Doane Agricultural Report, Doane Agricultural Service, 8900 Manchester Road, St. Louis, MO 62144.

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5. Doyen, Lee. Credit and Finance, 4th Ed., Cloud County Community College, Concordia, KS 66901, 1979.

6. Kelsey-Daniels. Handbook of Life Insurance. Institute of Life Insurance, 277 Park Avenue, New York, NY 10017.

7. Wolf, Harold A. Personal Finance, 5th Ed., Allyn and Bacon, Inc., Boston, Mass. 02210, 1978.

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RISK MANAGEMENT

UNIT 1

INFORMATION SHEET

I. Terms and Definitions

A. Actuary - A professionally trained expert on insurance and related fields, particularly on the mathematics of insurance, including the calculation of premiums, policy reserves and other value.

B. Agent - A sales and service representative of an insurance company. Life insurance agents are also known as "life underwriters."

C. Annuity - A contract that provides a regular income for life, or for a specified number of years, or for life but with payments for a certain period to a beneficiary if the annuitant does not live to receive them.

D. Application - A statement of information made by a person applying for insurance. (NOTE: This becomes part of the policy).

E. Automatic Premium Loan - A provision in or a supplement to a life insurance policy authorizing the company to pay automatically an overdue premium by means of a policy loan.

F. Beneficiary - The person named in a policy to receive the insurance proceeds at the death of the insured.

G. Blue Cross-Blue Shield - Blue Cross--An insurance which covers hospitalization. Blue Shield--An insurance which covers physician's fees, whether surgical, surgical-medical, or general medical.

H. Cash Value - The amount of money that will be paid to the owner or a whole life or endowment policy if he elects to give up the policy.

I. Claim - A formal notice to an insurance company requesting payment of an amount due under the terms of a policy.

J. Co-Insurance - A policy provision frequently found in major medical insurance, by which both the insured person and the insurer share, in a specific ratio, the hospital and medical expenses resulting from an illness or injury.

K. Convertible - Term insurance which can be exchanged, at the option of the policyholder and without evidence of insurability, for a term policy or the whole life or endowment plans.

INFORMATION SHEET

L. Credit Insurance - Written through lending institutions on lives of borrowers.

M. Cripple Children Commission - Financed by Kansas legislature to take care of congenital children defects.

N. Cripple Children League - Financed by private donations to take care of children with defects that parents cannot financially afford to take care of.

O. Deductible - Found in major medical insurance; is that portion of covered hospital and medical charges which an insured person must pay before his policy's benefits begin.

P. Disability Benefit (waiver of premium) - The provision added to life insurance to pay premiums if totally and permanently disabled.

Q. Double Indemnity - An accidental death benefit to pay double face amount in case of death by accident.

R. Endowment Insurance - Insurance payable to the insured if living on maturity date or death prior to maturity.

S. Extended Term Insurance - The original amount of life insurance protection extended for a period of time as stated in a whole life or endowment policy should premium payments be discontinued.

T. Face Amount - Amount stated on the face of the policy that will be paid in case of death or at maturity. The face amount does not include dividend additions, or additional amounts payable under accidental death or other special provisions.

U. Family Income Policy - A life insurance policy which, upon the death of the beneficiary until the end of the specified period agreed upon at the time of purchase. The face amount of the policy is paid to the beneficiary depending on the terms of the policy, at the beginning or the end of the income period.

V. Family Income Life Insurance - A combination of permanent life insurance and decreasing term insurance.

W. Family Plan - A life insurance policy which provides insurance on the lives of all members of a family. The policy, generally issued to the husband, provides a smaller amount of insurance on the lives of the wife and all children, including those born after issue of the insurance.

X. Grace Period - A period (usually 31 days) following the premium due date, during which an overdue premium may be paid without penalty. The policy remains in force throughout this period.

INFORMATION SHEET

Y. Group Life Insurance - Life insurance issued, usually without medical examination, to a group of persons under a single policy. It is usually issued to an employer for the benefit of employees. The individual members of the group hold certificates describing their insurance.

Z. Guaranteed Renewable Policy - A health insurance policy which the insured has the right to continue in force by the timely payment of premiums to a specified age (usually age 50). During that period, the insurer has no right to make unilaterally any change in any provision of the policy while the policy is in force, but may make changes in premium rates by policyholder class.

AA. Health Maintenance Organization or Group Prepayment Medical Plans - Not really health insurance; it provides many of the same benefits, prepayment medical plan.

BB. Homeowner's Policy - A combination of several coverages or protections in one policy regarding home, personal property, and liability insurance.

CC. Industrial Life Insurance - Life insurance issued in small amounts, usually not over $1,000, with premiums generally collected weekly or monthly at the home by an agent of the company.

DD. Insurability - Acceptability to the company of an applicant for insurance.

EE. Insurance - Spreads the risk of one person's misfortune among a large number of persons.

FF. Lapsed Policy - A policy terminated for nonpayment of premium.

GG. Legal Reserve Life Insurance Company - A life insurance company operating under state insurance laws which specify the minimum reserves the company must maintain on its policies.

HH. Level Premium Insurance - Insurance for which the cost is distributed evenly over the period during which premiums are paid; that is, the premium remains the same from year to year. It is more than the actual cost of protection in the earlier years of the policy and less than the actual cost in the later years. The additional amounts paid in the early years help meet costs in later years.

II. Liability - When one is negligent and therefore, liable for injury or damage caused to someone else. (NOTE: Liability insurance protects one from claims made by other people and provides defense in the event of a groundless suit. Liability limits should be equal to assets.)

INFORMATION SHEET

JJ. Life Expectancy - The average number of years of life remaining for persons of a given age, according to a particular mortality table.

KK. Living Payments - Payments, during the lifetime of the policyholder, made by a life insurance company under terms of a policy. Among these are: matured endowments, annuities, policy dividends, cash value upon surrender and disability income payments.

LL. Loss Payable Clause - Names the mortgage company on the policy whereby any claim is payable to mortgage company up to the amount of mortgage.

MM. Medicaid - Authorized under Social Security amendment. Provides for medical expenses of the indigent regardless of age.

NN. Medicare - Authorized under the Social Security. Provides for two kinds of health insurance for those over 65, hospital insurance and medical insurance.

OO. Mortgage Insurance - Term insurance used to cover purchase of home or farm.

PP. Mortality Table - A statistical table showing the death rate at each age, usually expressed as so many per thousand.

QQ. National Health Insurance - Federal government health care; may be complete government or supplement to present insurance plan.

RR. No Fault Insurance - In regard to auto insurance, everyone's company will pay for their own damage and injury. (NOTE: State laws may amend this concept).

SS. Noncancellable Policy - A form of guaranteed renewable health insurance policy with all the same guarantees, and in addition, a guarantee of premium rates to a specified age, (usually age 50).

TT. Nonforfeiture Values - The choice of values, either in cash or in other forms of insurance, available to the policyholder if he elects to discontinue paying premiums. The other forms of insurance available are extended term insurance and reduced paid-up insurance.

UU. Nonparticipating Insurance - Insurance on which the premium is calculated to cover as closely as possible the anticipated cost of the insurance protection and on which no dividends are paid.

VV. Ordinary Life Insurance - Life insurance in amounts of $1,000 or more with premiums payable on an annual, semi-annual, quarterly, or monthly basis. The term is also used to mean the straight life policy.

INFORMATION SHEET

WW. Paid-up Insurance - Insurance on which all required premiums have been paid. The term is frequently used to mean the reduced paid-up insurance available as a nonforfeiture option.

XX. Participating Insurance - Insurance on which the policy-holder is entitled to receive policy dividends reflecting the difference between the premium charged and actual experience. The premium is calculated to provide some margin over the anticipated cost of the insurance protection.

YY. Permanent Life Insurance - Any form of life insurance which can be kept in effect to age 100. (Includes straight life, limited pay and endowment.)

ZZ. Policy - Document stating terms of contract that is issued to policyholder by the company.

AAA. Policy Dividend - A refund of part of the premium on participating policies plus interest.

BBB. Policy Loan - Cash loaned on the cash value of policy at a specified interest rate.

CCC. Premium - The payment or consideration one makes as a policyholder in agreement with the policy for insurance.

DDD. Program - An over all plan of life insurance for an individual or a family. The agent, in making his recommendations, takes into account the family's assets, its needs and its financial objectives. The plan usually provides income to the beneficiaries.

EEE. Rider - Additional coverage added to a basic policy such as double indemity and children born into a family.

FFF. Settlement Options - Alternative ways in which the policyholder or beneficiary may choose to have life insurance proceeds paid as income rather than as one lump sum.

GGG. Social Security - Act of congress which provides retirement and disability income and is funded by social security tax.

HHH. Term Life Insurance - Gives protection for a stated period of time and at the end of term is the termination of contract. Examples: 5 year term, 15 year term, decreasing term, or term to age 65.

INFORMATION SHEET

II. Types of Liability Insurance

A. Public Liability - protects policyholder from lawsuits by members of the public who suffer property or bodily injury caused by his negligence. (NOTE: This would apply to auto liability and farmer's comprehensive liability.)

B. Employer's Liability - Protects employer when he is liable for on-the-job accidents caused by his negeligence. (NOTE: This covers loss of time, medical care, bodily injury, sickness, and death.)

C. Workmen's Compensation - Pays the employee's medical expense regardless of who is negligent.

D. Farmer's Comprehensive Liability - Similar to public liability but is designed specifically for farmers.

III. Basic Automobile Coverages

A. Bodily Injury Liability - Protects the policyholder financially if he or a member of his family injures someone while operating his vehicle.

B. Property Damage Liability - Protects the policyholder financially if he or a member of his family damages someone's automobile or other property. (NOTE: Most policies also offer liability protection for one if driving a borrowed car, or if loaning one's car to someone else.)

C. Medical Reimbursement - Pays for any medical, dental, hospital, nursing, or funeral expenses incurred as the result of an auto or truck accident involving the insured vehicle regardless of fault.

D. Comprehensive Physical Damage - Insures auto against glass breakage, fire, theft, and all weather elements.

E. Collision - Insurance pays for damage to one's car regardless of the burden of negligence. (NOTE: Deductible choice ranges from $10 to $250).

F. Protection Against the Uninsured Motorist - Coverage for holder to recover loss for bodily injury caused by a person having no liability insurance.

IV. Interpretation of a 10-20-5 Automobile Policy

A. Ten indicates insured person is protected against damage up to $10,000 for one person.

INFORMATION SHEET

B. Twenty means insured person is protected against damages up to $20,000 for two or more persons injured in one accident. (NOTE: This is not in addition to the $10,000 protection for one person.)

C. The five indicates insured person is protected against $5,000 property liability damage. (NOTE: It costs very little to raise liability limits. 100-300-100 costs as little as $10.00 more per year than 10-20-5.)

V. Factors to Consider When Determining Types of Automobile Coverages to Buy.

A. Liability insurance should be purchased for every licenses vehicle.

B. Liability limits should be the same on all vehicles. (NOTE: Minimum liability limits should be equal to one's assets.)

C. It is advisable to carry medical insurance on every vehicle (NOTE: Medical payments cover passengers as well as the one insured and family.)

D. Consider dropping comprehensive and collision insurance when:

1. The car is paid for and there is no bank note.
2. One can afford to repair the car from personal funds.
3. One can do without the automobile if destroyed.
4. The value of car is not more than the cost of comprehensive and collision premiums.

(NOTE: All these factors should be considered and applied to each individual circumstance.)

VI. Items that Influence Automobile Insurance Premiums

A. Number of basic coverages one carries

B. Area one lives

C. Value and size of automobile

D. Age

E. Sex - (NOTE: Boys' rates are higher than girls'.)

F. Marital status

G. Distance one drives to work

H. Use of car - Business or pleasure

I. Driving habits of individuals

J. Claims paid on policy during past three year period

K. Rates must be similar for equal risks

L. Cost of repairs - (NOTE: Rates are set by each insurance company, and the insurance commission regulates these rates.)

VII. Ways to Save on Automobile Insurance

A. Safe driver discount - (NOTE: Some companies give a ten to twenty percent discount on basic premiums to those with a three year record of no involvement in accidents where they were at fault or convicted of traffic violations.)

B. Driver education discount - (NOTE: Discount varies from company to company, but the course must meet national standards and be successfully completed.)

C. Two or more cars discount

VIII. Types of Property Insurance

A. Fire and extended coverage - Protects dwellings, farm buildings, and personal property against the perils of fire, lightning, wind, hail, explosion, riot and civil commotion. (NOTE: Property does not have to be owner occupied).

B. Homeowners - A package policy generally for town property that insures the dwelling, additional private structures, personal property such as household goods, and the comprehensive personal liability; to qualify for this policy, the dwelling must be owner occupied. (NOTE: Homeowners insures against damage from fire, and extended coverage as described in item A, plus theft, vehicle damage, falling objects, weight office and snow, freezing of plumbing system, and hot water rupture, collapse of building(s), or any part thereof.

C. Farm owners - Same as homeowners plus optional coverage of farm barns and buildings, machinery, grain, hay, livestock, tools and equipment, and employer's liability.

IX. Items that Influence Cost of Property Insurance

A. Amount of protection

B. Type of construction (wood or brick)

INFORMATION SHEET

C. Location

D. Distance from fire department

E. Period of time covered

X. Basic Rules for Buying Property Insurance

A. Do not insure if financially able to do without or to replace with personal funds or if a loss would not hamper the farm operation.

B. Insure if there is a loan against property under personal ownership.

C. Write enough coverage to replace the loss.

XI. Crop Hail and Federal Crop Insurance

A. Crop hail

1. An insurance company policy that protects against loss by hail or fire; optional coverage is loss by wind.

2. The amount of loss payable is the amount of insurance multiplied by the percentage of damage.

3. Damage percentage is determined by sampling methods that are agreeable to both parties.

B. Federal crop insurance

1. Provides "all risk" crop investment insurance.

2. Does not insure profit for the farmer or cover avoidable able losses such as those caused by neglect or poor farming practices.

3. Pays up to the guaranteed yield. (NOTE: If actual yield is as much as guarantee then no payment is made regardless of extent of loss.)

XII. Kind of Life Insurance Policies

A. Term Insurance

1. Covers the stated number of years of term that the policy is in effect.

INFORMATION SHEET

2. Usually does not accumulate any cash value.
3. Insurance protection ends when the stated term expires.
4. Used for business insurance protection, creditor's risk, and general family protection.
5. For the time contracted, it is the cheapest form of life insurance.
6. Chances of death increase with age, therefore policy rates are higher for each succeeding period.
7. No guarantee of renewal.
8. Group insurance is usually term insurance.

B. Straight Life Insurance (whole life or ordinary life)

1. Provides lifetime protection
2. Most widely used of all permanent life insurance
3. Costs less annually than any other kind of lifetime protection
4. Premiums are paid throughout the policyholder's lifetime
5. Policy accumulates a cash value
6. Policyholder may borrow the cash value of his policy

C. Limited Payment Life Insurance

1. Provides lifetime protection
2. Premiums are paid only during a specified period of time
3. Fewer premiums are necessary so each one is larger
4. Accumulates cash value
5. Twenty years, or thirty years pay, or paid up at 65 are examples of limited payment life insurance (NOTE: Anyone having above average income for a few years might consider this type of insurance.)

D. Endowment Life Insurance

1. Policy puts emphasis on savings more than any other life insurance.

INFORMATION SHEET

2. Purpose is to accumulate a certain amount of money in a specified period, while providing life insurance.

3. If policyholder lives, whole amount of policy is paid to him when endowment comes due.

4. If policyholder dies before the period has elapsed, the full amount of the policy is paid to beneficiary.

5. Expensive form of insurance for protection.

6. Suits those who save money for education of children, or during retirement.

XIII. Instances When Family Income Life Insurance is Needed Most (NOTE: Combination of permanent life and decreasing term insurance.)

A. When there are small children to be reared or educated

B. While policyholder is paying off mortgage

XIV. Factors That Determine Amount of Life Insurance Needed

A. Family's income and net worth

B. Size of the family

C. Age and sex of the children

D. Skills and abilities of the wife and older children

E. Indebtedness of the family

F. Long-time goals including college education for the children

XV. Kinds of Health Insurance

A. Hospital-Surgical-Medical

1. Known as first dollar coverage with a small deductible clause. Example: $20, $50, or $100 deductible

2. Usually has specified limits on room and board, hospital special charges, surgery, and out-patient care.

INFORMATION SHEET

B. Major Medical

1. Pays for expenses associated with a catastrophe and has a large deductible clause of from $100 to $1,000 but has a large benefit limit. Example: $10,000 to $20,000.
2. Usually covers most all expenses over the deductible with possible limit on room, board, and surgery.
3. Has larger benefit period than hospital-surgical-medical. Example: three years
4. Major medical usually pays 80% for all eligible expenses for the first one to five thousand dollars and 100% thereafter until maximum benefits are reached.

C. Disability Income

1. Pays a stated amount while a person is disabled because of injury or illness.
2. Deductibles on disability income are called waiting periods. (NOTE: This is the period between the start of disability and beginning of payment.)
3. Has different combinations of waiting periods. (NOTE: Example: 0/0 means no waiting period for accident or sickness, 30/90 means 30 day waiting period for accidents and 90 day waiting period for sickness.)
4. Variations in length of benefit periods may be purchased. Example: Life time benefits for accidents and five year benefits for sickness.
5. Usually there are smaller benefits for partial disability. (NOTE: The hospital-surgical-medical, major medical, and disability income policies can be purchased in group plans, individual plans, and family plans. Many employers of larger firms provide group plans for employees.)

XVI. Features of Workmen's Compensation

A. In effect in all states

B. Employer must insure employees

C. Covers injury on the job

D. Covers illness as a result of job

E. Pays percentage of earnings while disabled

INFORMATION SHEET

F. Pays accidental death benefits

G. Protects the employer regardless of who is negligent

H. Applies usually to firms with four or more full time employees (NOTE: Dairys and feedlots with three or more employees may come under workmen's compensation.)

XVII. Kinds of Work Covered by Social Security

A. Almost every kind of employment and self-employment (NOTE: Some occupations are covered only if certain conditions are met.)

B. Self-employed farmers and ranchers. (NOTE: If net earnings from self-employment are $400 or more in a year.)

C. Farm employees-Social Security credits are earned while working for a farmer, a ranch operator, or a farm labor crew leader.

1. If the employer pays $150 or more in cash during the year for farm work.
2. If farm work for the employer involves twenty or more days during the year for cash wages.

XVIII. Benefits Paid from Social Security (TM 1)

A. Monthly retirement benefits - Payable in full at age 65 with reduced benefits as early as age 62.

B. Monthly survivor's benefits are payable to the following:

1. Widow at 62
2. Unmarried children under 18 (Under 22, if full-time student)
3. Children 18 or over if disabled before age 18
4. Widow at any age if she is caring for child under 18
5. Widow as early as age 50 if she has a severe disability
6. Dependent parents 62 or over
7. Dependent widower 62 or over

INFORMATION SHEET

C. Monthly Disability Benefits - Payable to one before 65 with a severe disability that has lasted at least 12 months.

D. Medicare - A two-part health insurance program for older people.

E. Lump sum for funeral expenses payable to survivor at death of the person paying social security.

XIX. Reasons Social Security Payments Stop

A. Marriage to one who is not covered by social security insurance payments. (NOTE: An exception is for the widow who remarries after reaching age 60).

B. Divorce - All payments end if divorce is granted unless one is age 62 or older or if the marriage lasted at least thirty continuous years.

C. No Child "in her care" - Payment to wife under 62 stops when she no longer has a child under 18 or disabled.

D. Child Reaches 18 - Payments stop unless he is disabled or a full-time unmarried student.

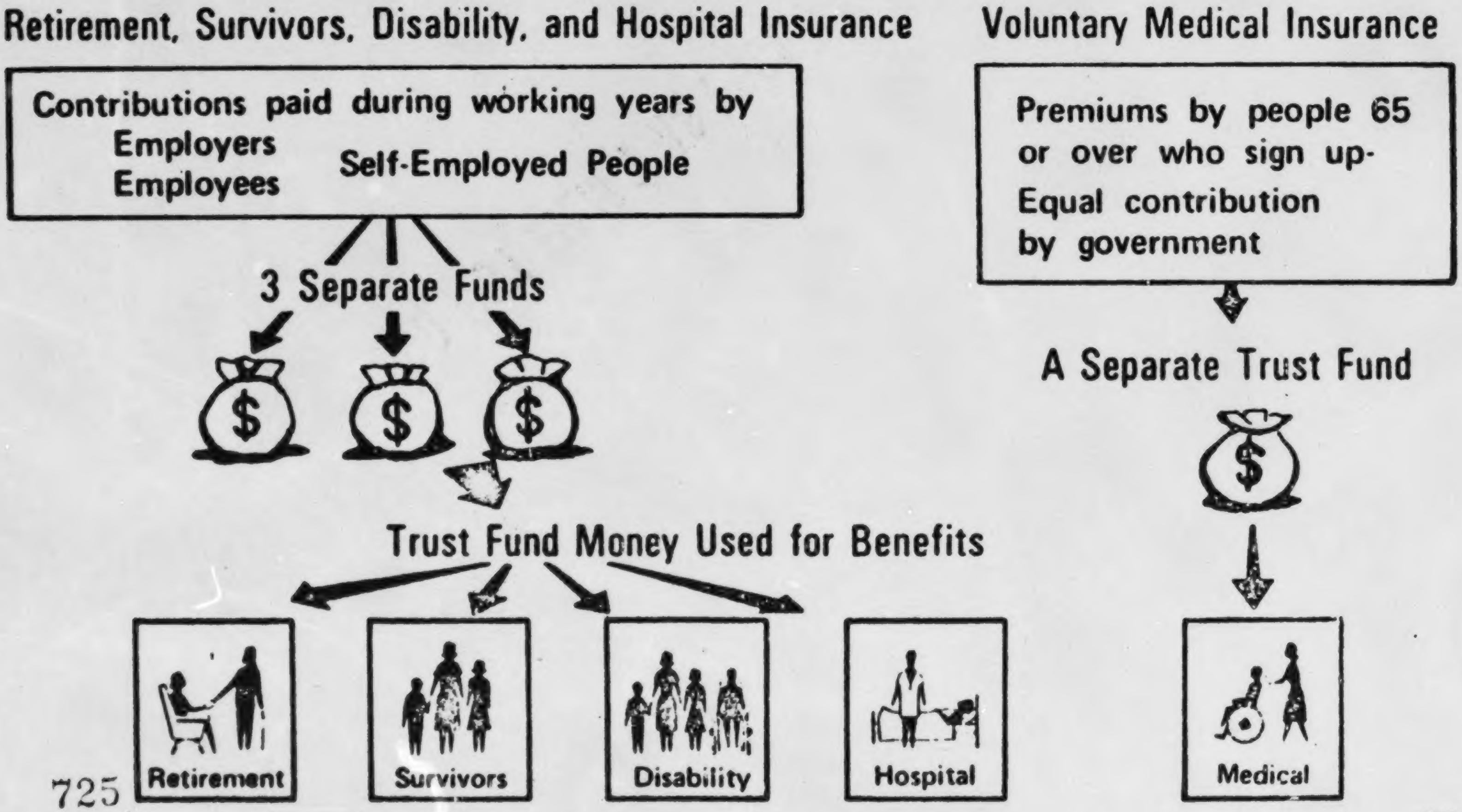
E. Adoption - Payments end unless person is adopted by stepparent, grandparent, aunt, uncle, brother or sister.

F. Death - Applies to any person receiving monthly benefits.

G. Disability - If no longer disabled, payments stop to dependants.

SOCIAL SECURITY

Where the Money Comes From, Where the Money Goes



Retirement, Survivors, Disability, and Hospital Insurance

Contributions paid during working years by
Employers
Employees
Self-Employed People

3 Separate Funds

Trust Fund Money Used for Benefits

Voluntary Medical Insurance

Premiums by people 65 or over who sign up-
Equal contribution by government

A Separate Trust Fund

TM 1

SJ UI-19

RISK MANAGEMENT

UNIT 1

ASSIGNMENT SHEET #1: Evaluating Your Family Insurance Program

With the help of your parents, complete the following information in regard to your family insurance program.

1. Review of your automobile insurance.

Auto Description	Liability Limits	Medical	Comprehensive	Collision

a. Liability limits are the same on each vehicle. Yes____ No____

b. Liability limits are equal to family assets. Yes____ No____

c. Each vehicle has medical coverage. Yes____ No____

d. Comprehensive and collision should be dropped on older vehicles. Yes____ No____

e. Comprehensive and collision should be added to one or more vehicles. Yes____ No____

f. All vehicles have liability coverage. Yes____ No____

g. Using the information and recommendations included in this unit, what changes would you recommend in the coverages of your family vehicles?

ASSIGNMENT SHEET #1

2. Review of Your Property Insurance Program

Description	Amount of Coverage
Dwelling	________
Contents	________
Garage	________
Barn	________
Other Building #1	________
Other Building #2	________
Other Building #3	________
Farm Liability or Personal Liability	________
Machinery	________
Tools	________
Livestock	________
Grain	________
Hay	________
Other:	________

a. Our property is fully insured. Yes____ No____

(NOTE: To be fully insured and avoid co-insurance on the dwelling, it must be insured for at least eighty percent of replacement cost).

b. In the event house and contents are lost to fire, insurance would replace same house, all clothes, furniture, appliances, books, etc.

Yes____ No____

ASSIGNMENT SHEET #1

c. All barns vital to farm operation are insured.

Yes____ No____

d. All tools, machinery, hay and grain vital to the farm operation are insured.

Yes____ No____

e. Liability limits are adequate to protect farm or property in the event of a suit.

Yes____ No____

f. Liability coverage includes protection for employees.

Yes____ No____

g. Crop hail or federal crop insurance is used on our farm.

Yes____ No____

h. Based on information and recommendations in this unit, what suggestions would you make in your family's property insurance coverages?

3. Review your family's life insurance program.

	Amount of Policy	Kind of Policy
Father		
Mother		
Yourself		
Brother		
Sister		

a. In event of death of your father, there would be enough cash, including life insurance proceeds, to pay all debts, funeral expenses, etc.

Yes ___ No ____

ASSIGNMENT SHEET #1

b. After paying debts and expenses, family income would be such to insure adequate education for all children.

Yes ___ No___

c. Enough cash to pay state and federal estate taxes will be available in the event of death of mother or father.

Yes___ No___

(NOTE: For more information, check with your accountant, attorney, or insurance agent.)

d. Members of my family have term insurance coverage that should be converted to permanent coverage. Yes ___ No___

4. Review of health insurance and social security.

a. All members of family are covered by health insurance.

Yes ___ No____

b. Hospital surgical type coverage is included in our policy.

Yes ___ No___

c. Major medical coverage is included in our policy.

Yes ___ No ___

d. At least one member of family is covered by disability income or workmen's compensation. Yes ___ No ___

e. My parents and I have recently checked our accounts with social security to verify the credit of all payments.

Yes ___ No___

(NOTE: Any mistakes the social security administration has made during the past three years can be corrected. Mistakes not corrected within three years are lost.)

f. If answer to "e" was no, obtain from your postmaster a card which may be mailed to the social security administration for verification of your payments.

RISK MANAGEMENT

UNIT 1

TEST

1. Match the following definitions with the terms on the right.

(NOTE: Answers to "a" through "m" are listed on this page).

____a. Insurance payable to the insured if living on maturity date or death prior to maturity

____b. An accidental death benefit to pay double face amount in case of death by accident

____c. The provision added to life insurance to pay premiums if totally and permanently disabled

____d. Gives protection for a stated period of time and at the end of term is the termination of contract

____e. Includes straight life, limited pay, and endowment

____f. Written through lending institutions on lives of borrowers

____g. A combination of several coverages or protections in one policy regarding home, personal property and liability insurance

____h. A combination of permanent life insurance and decreasing term insurance

____i. When one is negligent and therefore liable for injury or damage caused to someone else

____j. Act of congress which provides retirement and disability income and is funded by social security tax

1. Endowment insurance
2. Disability benefit (Waiver of premium)
3. Double indemnity
4. Insurance
5. Premium
6. Family income life insurance
7. Credit insurance
8. Term life insurance
9. Permanent life insurance
10. Homeowner's policy
11. Liability

TEST

____k. When one is carrying part of the risk and is not fully insured

____l. Spreads the risk of one person's misfortune among a large number of persons

____m. The payment or consideration one makes as a policyholder in agreement with the policy for insurance

(NOTE: Answers to "n" through "bb" are listed on this page.)

____n. Cash loaned on the cash value of policy at a specified interest rate

____o. Term insurance exchanged at option of policyholder without evidence of insurability for another insurance plan

____p. Amount available in cash upon voluntary termination of policy before death

____q. A contract that provides an income for a specified period of time such as a number of years or for life

____r. A statement of information made by a person applying for insurance

____s. A provision authorizing the premium to be subtracted from policy cash values if not paid by the end of the grace period

____t. Person named in the policy to receive proceeds at death of insured

____u. Amount stated on the face of the policy that will be paid in case of death or at maturity

____v. A period (usually 31 days)following the premium due date during which a premium may be paid without a penalty

____w. Insurance which is usually issued without medical examination on a group of persons under a single master contract

12. Co-Insurance
13. Social security
14. Cash value
15. Automatic premium loan
16. Annuity
17. Application
18. Beneficiary
19. Convertible
20. Policy loan
21. Policy
22. Group insurance
23. Face amount
24. Loss payable clause
25. Grace period
26. Lapsed policy
27. Policy dividend
28. No fault insuran

TEST

____x. A policy terminated for non-payment of premium

____y. Document stating terms of contract that is issued to policyholder by the company

____z. A refund or part of the premium on participating policies plus interest

____aa. Names the mortgage company on the policy whereby any claim is payable to mortgage company up to the amount of mortgage

____bb. In regard to auto insurance, everyone's company will pay for their own damage and injury

(NOTE: Answers to "cc" through "nn" are listed on this page.)

____cc. Professional trained expert on insurance and related fields

____dd. Insurance which covers hospitalization

____ee. Formal notice to an insurance company requesting payment of an amount due under the terms of the policy

____ff. Sales and service representative of an insurance company

____gg. Family receives monthly income which was agreed upon in original policy and for the length of time

____hh. That portion of covered hospital and medical charges which an insured person must pay before his policy benefits begin

____ii. Written through lending institutions on lives of borrowers

____jj. Covers physicians fees and surgical costs

29. Actuary
30. Agent
31. Blue Cross
32. Blue Shield
33. Claims
34. Co-Insurance
35. Credit insurance
36. Deductible
37. Cripple Children Commission
38. Cripple Children League
39. Extended Term Insurance
40. Family Income

TEST

___kk. Both the insured person and the insurer share the hospital and medical expenses resulting from an illness or injury

___ll. Financed by Kansas legislature for care of congential children defects

___mm. The original amount of life insurance protection extended for period of time as stated

___nn. Financed by private donations to take care of children with defects that parents cannot afford totake care of

(NOTE: Answers to "oo" through "zz" are listed on this page.)

___oo. A policy which provides insurance for all members of the family and any additional children born

___pp. Acceptability to the company of an applicant for insurance

___qq. Premiums remain same from year to year

___rr. A form of guaranteed renewable health insurance with all same guarantees

___ss. The average number of years of life remaining for persons of a given age

___tt. Health insurance policy which insured has right to continue in force. Insurer has no rights to make unilaterally any changes in any provisions of the policy

___uu. Group prepayment medical plan and not really health insurance

___vv. Life insurance payments made to holder during his life time

___ww. Government health care, maybe complete or supplemental

___xx. Choice of values by policyholder if he elects to discontinue paying premium

___yy. An insurance company operating under state insurance laws

41. Family plan
42. Guaranteed renewable policy
43. Insurability
44. Health maintenance organization
45. Life expectancy
46. Living payments
47. Legal reserve life
48. Mortality table
49. Noncancellable policy
50. Level premium
51. National health insurance
52. Nonforfeiture value

TEST

___zz. A statistical table showing death rate at each age

(NOTE: Answers to "aaa through "kkk" are listed on this page.)

___aaa. Insurance in amount of $1,000 or more with premiums payable

___bbb. No dividends are paid on insurance as the premiums are calculated as closely as possible the anticipated cost of the insurance protection

___ccc. Additional coverage added to a basic policy such as double indemity and children born into a family

___ddd. Provides for two kinds of health insurance for those over 65, hospital and medical

___eee. Term insurance used to cover purchase of home or farm

___fff. An over-all plan of life insurance for an individual or family

___ggg. Policyholder is entitled to receive policy dividends

___hhh. Provides for medical expenses of the indigent regardless of age

___iii. A form of insurance which can be kept in effect to age 100

___jjj. Alternative ways a policyholder as beneficiary may choose to have life insurance proceeds paid

___kkk. All required premiums have been paid

53. Non-participating
54. Ordinary life insurance
55. Paid-up life insurance
56. Participating insurance
57. Permanent life insurance
58. Programs
59. Rider
60. Medicaid
61. Medicare
62. Settlement options
63. Mortgage insurance

TEST

2. Match the following definitions of liability insurance with the terms on the right.

____a. Pays the employee's medical expense regardless of who is negligent

____b. Similar to public liability but is designed specifically for farmers

____c. Protects policyholder from lawsuits by members of the public who suffer property or bodily injury caused by his negligence

____d. Protects employer when he is liable for on-the-job accidents caused by his negligence

1. Public liability
2. Employer's liability
3. Workmen's compensation
4. Farmer's comprehensive liability

3. Match the basic auto coverages with the terms on the right.

____a. Insurance pays for damages to one's car regardless of the burden of negligence

____b. Pays for any medical, dental, hospital, nursing, or funeral expenses incurred as the result of an auto or truck accident involving the insured vehicle regardless of fault

____c. Protects the policyholder financially if he or a member of his family injures someone while operating his vehicle

____d. Protects the policyholder financially if he or a member of his family damages someone's automobile or other property

____e. Insures auto against glass breakage, theft, and all weather elements

____f. Coverage for holder to recover loss for bodily injury caused by a person having no liability insurance

1. Protection against uninsured motorist
2. Bodily injury liability
3. Property damage liability
4. Medical reimbursement
5. Comprehensive physical damage
6. Collision

TEST

4. Explain in writing what is meant by a 10-20-5 automobile liability policy.

5. Select from the list below the factors that determine what automobile coverages to buy. Place an "X" by the correct factors.

____a. Liability insurance would be purchased for every licensed vehicle

____b. Liability limits should be less on automobiles not used very often

____c. It is not advisable to carry medical insurance on every vehicle

____d. Consider dropping comprehensive and collision insurance when able to afford repair on the car from personal funds

6. Select from the list below those items that influence automobile insurance premiums. Place an "X" by the correct items.

____a. Number of basic coverages one carries

____b. Area one lives

____c. Name of car manufacturer

____d. Age

____e. Sex

____f. Height

____g. Driving habits of individuals

7. List two ways to save on automobile insurance.

a.

b.

TEST

8. Match the types of property insurance on the right with the proper definition.

____a. A package policy general town property that insures the dwelling, additional property such as household goods, and comprehensive personal liability; to qualify for this policy, the dwelling must be owner occupied

____b. Protects dwelling, farm buildings, and personal property against the perils of fire, lightning, wind, hail, explosion, riot, and civil commotion

____c. Same as homeowners plus optional coverages of farm barns and buildings, machinery, grain, hay, livestock, tools and equipment, and employer's liability

1. Fire and extended coverage
2. Homeowners
3. Farm owners

9. Select from the list the items that influence the cost of property insurance. Place an "X" by the correct items.

____a. Amount of protection

____b. Type of construction (wood or brick)

____c. Age of people living on property

____d. Distance from fire department

____e. Marital status of applicant

10. Name two basic rules to use when buying property insurance.

a.

b.

11. Distinguish between crop hail and federal crop insurance by writing crop hail or federal crop as it applies to the following statements.

a. ______________________Pays up to the guaranteed yield

b. ______________________An insurance company policy that protects against loss by hail or fire; optional coverage is loss by wind

TEST

c. ______________________The amount of loss payable is the amount of insurance multiplied by the percentage of damage

d. ______________________Provides "all risk" crop investment insurance

e. ______________________Damage percentage is determined by sampling methods that are agreeable to both parties

f. ______________________Does not insure profit for the farmer or cover avoidable losses such as those caused by neglect or poor farming practices

12. Match the characteristics on the left with the correct kind of life insurance on the right.

(NOTE: These terms can be used more than once.)

____a. Covers the stated number of years or term that the policy is in effect

____b. Premiums are paid throughout the policyholder's lifetime

____c. Premiums are paid only during a specified period of time; provides lifetime protection

____d. No guarantee of renewal

____e. Policy puts emphasis on savings more than any other life insurance

____f. Expensive form of insurance for protection

____g. Most widely used of all permanent life insurance

1. Term insurance
2. Limited payment life insurance
3. Endowment life insurance
4. Straight life insurance

13. Discuss in writing instances when a family income life insurance policy would be needed most.

TEST

14. Select from the list below the factors that determine the amount of life insurance needed. Place an "X" by the proper factors.

____a. Size of the family

____b. Age and sex of children

____c. Indebtedness of the family

____d. Location within the state

____e. Race

15. Match the type of health insurance coverage on the right with the proper definition.

____a. Insurance covers, usually on some co-insurance basis, the cost of fillings, extractions, dentures, oral surgery and most other dental expenses including orthdontic work

____b. An all inclusive medical insurance which is an attempt to meet all health insurance needs with one package

____c. Type of health insurance policy that will pay all or part of a person's hospital bills

____d. Provides for general medical expenses not covered by surgical and hospital plans, takes care of such items as drugs and visits to doctor's office

____e. Surgical fees payment is not included in policies that cover hospital fees

____f. Policy is written in the nature of catastrophe insurance. Generally contains a deductible feature and a co-insurance feature

____g. Policies generally have two feature: (1) payment as the result of loss of earnings from an accident and (2) payment as the result of loss of earnings from sickness that prevents one from earning a living

1. Hospital expense
2. Surgical expense
3. Regular medical expenses
4. Major medical expenses
5. Comprehensive coverage
6. Disability or loss of income
7. Dental insurance

TEST

16. Select from the list below the features of workmen's compensation for those who qualify. Place an "X" by the statement.

____a. Employer must insure employees

____b. Covers injury on the job

____c. Pays percentage of earnings while disabled

____d. Usually applies to firms with two full time employees

____e. Pays death benefits regardless of cause

____f. Protects the employee unless he is negligent

17. Select from the list below the kinds of work covered by social security. Place an "X" by correct answers.

____a. Almost every kind of employment and self-employment

____b. Farm employee working fifteen days for a farmer and receiving $140.00 for this work

____c. Self-employed farmers and ranchers

18. Select from the list below the benefits that are paid from social security funds. Place an "X" by the correct statements.

____a. Monthly survivors benefits to a widow at age 62

____b. Monthly survivors benefits to a widow at any age if she is caring for a child under 18

____c. Full benefits for retirement at age 62

____d. Medicare--A two-part health insurance program for older people

19. Select from the list below the reasons social security payments stop. Place an "X" by the correct answers.

____a. All payments end if divorce is granted unless one is age 62 or older or if the marriage lasted at least thirty continuous years

____b. Payments to wife under 62 stop when she no longer has a child under 24 or disabled.

TEST

____c. When a person is no longer disabled, payments stop to dependents

____d. When a dependent child reaches 18, payments stop even if he is a full time student

____e. Payments stop whenever a dependent child is adopted unless adopted by stepparent, grandparent, aunt, uncle, brother or sister.

RISK MANAGEMENT

UNIT 1

ANSWERS TO TEST

1. a. 1
b. 3
c. 2
d. 8
e. 9
f. 7
g. 10
h. 6
i. 11
j. 13
k. 12
l. 4
m. 5
n. 20
o. 19
p. 14
q. 16
r. 17
s. 15
t. 18
u. 23
v. 25
w. 22
x. 26
y. 21
z. 27
aa. 24
bb. 28
cc. 29
dd. 31
ee. 33
ff. 30
gg. 40
hh. 36
ii. 35
jj. 32
kk. 34
ll. 37
mm. 39
nn. 38
oo. 41
pp. 43
qq. 50
rr. 49
ss. 45
tt. 42
uu. 44
vv. 46
ww. 51
xx. 52
yy. 47
zz. 48
aaa. 54
bbb. 53
ccc. 59
ddd. 61
eee. 63
fff. 58
ggg. 56
hhh. 60
iii. 57
jjj. 62
kkk. 55

ANSWERS TO TEST

2. a. 3
   b. 4
   c. 1
   d. 2

3. a. 6
   b. 4
   c. 2
   d. 3
   e. 5
   f. 1

4. a. Ten indicates insured person is protected against damages up to $10,000 for one person

   b. Twenty means insured person is protected against damages up to $20,000 for two or more persons injured in one accident

   c. The five indicates insured person is protected against property damage to others up to $5,000

5. a
   d

6. a
   b
   d
   e
   g

7. Any two of the following:

   a. Safe driver discount

   b. Driver education discount

   c. Two or more cars discount

ANSWERS TO TEST

8. a. 2

   b. 1

   c. 3

9. a

   b

   d

10. Any two of the following:

    a. Do not insure if financially able to do without or to replace with personal funds, or if a loss would not hamper the farm operation

    b. Insure if there is a loan against property under personal ownership

    c. Write enough coverage to replace the loss

11. a. Federal crop

    b. Crop hail

    c. Crop hail

    d. Federal crop

    e. Crop hail

    f. Federal crop

12. a. 1

    b. 4

    c. 2

    d. 1

    e. 3

    f. 3

    g. 4

ANSWERS TO TEST

13. When there are small children to be educated or reared or while policyholder is paying off mortgage

14. a

    b

    c

15. a. 7

    b. 5

    c. 1

    d. 3

    e. 2

    f. 4

    g. 6

16. a

    b

    c

17. a

    c

18. a

    b

    d

19. a

    c

    e

RISK MANAGEMENT

UNIT II

FARM LAW

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to identify and be aware of the types of farm laws that will affect him on the farm. With this knowledge, the student can help reduce the risks confronting them. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Identify the five classifications of laws as they affect farmers.
2. Identify four sources of laws.
3. Identify six sources who influence the making of laws.
4. Identify six sources where to find laws in force.
5. Identify three legal classification of contracts.
6. Identify points to be considered in the contracts affecting farmers. (See Assignment Sheets #1)
7. Describe the laws affecting farm leases between landlord and tenant.
8. Describe the laws affecting livestock and fences.
9. Describe the laws affecting Kansas seed and crop production.
10. Identify the Kansas pesticide laws and regulations affecting field crop chemicals.
11. Identify the four times a pesticide applicator should read the label.
12. Identify the seven checks to make to prevent accidents while using pesticides. (Transparencies #1, 2, 3)
13. Identify the seven general precautions for herbicidal safety.
14. Identify and discuss the five regulations affecting pollution control of feedlots.

SPECIFIC OBJECTIVES

15. Identify the laws affecting irrigation and water rights.
16. Identify six ways of figuring interest between borrower and lender.

RISK MANAGEMENT

UNIT II

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Discuss Terminal and Specific Objectives
5. Discuss Information and Assignment Sheets
6. Give Test

Students:

1. Read Objectives
2. Study Information Sheets
3. Complete Assignment Sheets and turn into instructor
4. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparencies

TM 1 - Common Facts to Remember About Pesticide Use

TM 1a- Common Facts to Remember About Pesticide Use

TM 1b- Common Facts to Remember About Pesticide Use

INSTRUCTIONAL MATERIALS

4. Assignment Sheets

   #1 - Points to be Considered in Contracts Affecting Farmers

   #2 - Checklist for Preventing Pesticide Accidents

   #3 - Ways to Figure Interest

5. Test

6. Answers to Test

References:

1. A Workbook for Private Applicators. U.S. Environmental Protection Agency, Cooperative Extension Service, Kansas State University, Manhattan, Kansas.
2. Adams, R.L. and Bedford, W.W. Everyday Farm Laws. The Interstate Printers and Publishers, Danville, Illinois, 1955.
3. Apply Pesticides Correctly. U.S. Department of Agriculture and U.S. Environmental Protection Agency, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402
4. Doane Agriculture Digest. Doane Agricultural Service, 8900 Manchester Road, St. Louis, Missouri 62144.
5. Do Your Own Legal Work. Favour Enterprise, Inc. 3737 Foothill Drive, Provo, Utah 84601, 1977.
6. Hannah, Harold W. Law on the Farm. The MacMillan Co., 866 3rd Ave., New York, N.Y. 10022, 1950.
7. Hannah, H.W. and Storm, Donald F. Law for the Veterinarian and Livestock Owner. The Interstate Printers and Publishers, Inc., Danville, Illinois, 1965.
8. The Kansas Noxious Weed Law. Weed and Pesticide Division, Kansas Department of Agriculture, Topeka Ave., Topeka, Kansas 66612, 1975.
9. Kansas Pesticide Law and Regulations. Kansas State Board of Agriculture, 1720 South Topeka Ave ., Topeka Kansas 66612, 1978.
10. Kansas Supplement. Private Pesticide Applicator Certification. Cooperative Extension Service, Kansas State University, Manhattan, Kansas.

INSTRUCTIONAL MATERIALS

References:

11. Label Exercises. Private Pesticide Applicator Certification, Cooperative Extension Service, Kansas State University, Manhattan Kansas.

12. Levi, Donald R. Agricultural Law. 4th Ed., Lucas Brothers Publishers, Columbia, Missouri, 1978.

13. Logan, James K., and Pine, Wilfred H. Kansas Laws for Farm Landlords and Tenants. Cir. 384, Agri-Experiment Station, Kansas State University, Manhattan, Kansas, 1974.

RISK MANAGEMENT

UNIT II

INFORMATION SHEET

I. Terms and Definitions

A. International - Treaties and reciprocal trade pacts are forms of international agreement in which agriculture has a deep interest. Export, imports and tariffs are all part of international law. International law, or those rules which exist between nations, is largely an outgrowth of custom. The standards of international law would seem to depend upon the practical idealism of mankind generally.

B. Constitutional - Federal and state constitution passed by the governing bodies.

C. Statutory - Laws passed by the governing bodies of the federal, state and local governments.

D. Administrative - Laws that are passed by the governing bodies must be administered. It is the interpretation of the laws by the courts and individuals in administrative positions that put teeth in the law.

E. Common law - The opinions of judges in deciding cases over the years, and the rules laid down by them make up what is known as common law.

II. The Four Sources of Laws

A. Custom - Rules developed through custom and usage, often become incorporated into statutory law or are expressed by judges in rendering decisions and then become "common-law" principles. Example - ordinary division of crops in the community.

B. Lawmaking bodies - Laws created by legislative or semi-legislative bodies. Congress and the state legislatures are the principal sources of statutory law affecting farm people. Example - City may have ordinance regulating the sale of milk.

C. Judges - Are sources of law because opinions given by them become a matter of record and establish precedents which will be adhered to, or at least considered, in future cases involving similar facts.

INFORMATION SHEET

D. Administrative - With the growth of administrative organizations and with the responsibility which has been placed on such agencies for carrying out various programs designed to aid agriculture, has come an increasing number of regulations commonly referred to as administrative rulings. Example - Government programs that are building.

III. The Six Sources who Influence the Making of Laws

A. Individuals

B. Outside agencies

C. Private groups

D. Legislative committees

E. Legislatures

F. Lobbyist or pressure groups

IV. The Six Sources Where to Find Laws in Force

A. Lawyers

B. Law books

C. Statutes

D. Popular articules in newspapers and magazines

E. Elected officials

F. Federal, state, county and city officials

V. The Three Legal Classification of Contracts

A. Express - Contracts are definite agreements arrived at directly by word of mouth or writing

B. Implied - Contracts result where parties are in such a way as to create mutual obligations without actually entering into an express verbal or written agreement.

C. Quasi or constructive - Contracts are not agreements between parties at all but are obligations created by law where justice demands that one party should compensate another for benefit received.

INFORMATION SHEET

VI. See Assignment Sheets Concerning Points to be Considered in the Contracts Affecting Farmers

VII. Terms Affecting Farm Leases Between Landlord and Tenant

A. Oral lease - Oral leases for more than a year are void.

B. Written leases - Written leases can be for any length of time.

C. Farm tenants who remain with the landlord's consent after the lease expires normally are tenants from year to year.

D. No notice of termination is necessary with a valid lease for a specific term.

E. By Kansas law tenancies from year to year may be terminated on 30 days notice, in writing, to the tenant before the end of the year.

F. The law requiring 30 days' notice to terminate year to year leases does not require a tenant to give notice to his landlord.

G. Notice of termination must be as the law states.

1. May be served on the tenant.

2. May be left at the tenant's usual residence (if he cannot be found).

3. May be delivered to a person more than 12 years old residing on the premises.

4. May be posted on a conspicious place on the premises if no person is found on said premises.

5. May be sent by registered mail to the tenant at his usual residence.

6. Delivery of registered mail is proved by an affidavit by the person who mailed it or by the return receipt.

H. Leases of less than two years cannot be transferred by the tenant to another person without consent of the landlord.

I. A valid assignment of tenant's interest or a valid sublease gives the new tenant right against the landlord.

J. A landlord may sell his farm without tenant consent.

INFORMATION SHEET

K. A lease is binding on heirs of the deceased landlord or tenant

L. A lease from a landlord owning only a life estate terminates with his death except the rights to crops already planted.

M. Landlords and others with an interest in land may sue to prevent or collect damage for waste.

N. Landlord owns share of crop (after division) payable as rent.

O. Rent due for land is a lien on the crops and is automatic. No filing or writing is required.

P. Owner of pasture land who leases or rents them exclusively for pasture has a just lien on all pastured livestock, for payment of the pasture.

Q. A landlord may recover rent due him from a purchaser with notice of a lien.

R. When a landlord's rent is endangered, he may attack the tenant's property.

S. If a tenant neglects to pay rent when due, the landlord can terminate a lease after 10 days written notice unless rent is paid within the 10 days.

T. A tenant may waive exemption laws for debts contracted for rent.

U. The law requiring fishing and hunting licenses does not apply to an owner of land, or a tenant, or his immediate family living with him, so long as the fish or game are taken by "legal methods" from land they operate.

V. The tenant does have a right to remove improvements made on land, if his lease does not prevent it. Must get off before lease expires.

W. Tenant that has a lease for a specified term can not harvest crops that mature later.

X. Kansas laws do not cover a landlord's right of entry, right to hunt (without tenant's permission), or right to make any special use of leased premises. These should be included on lease. Common law allows landlord rights to make reasonable inspection of his premises and to install new improvements.

INFORMATION SHEET

VIII. Laws Affecting Livestock and Fences

A. If a man keeps a ferocious animal, he is bound to know at his peril that the object is a continual threat to his neighbors. Unless a person injured by such an animal is himself negligent, the owner can be held liable for injuries caused.

B. When hunters or other persons come on farm property without the consent of the owner, they are classed as trespassers and cannot be heard to complain if they are injured by the owner's animals. But if a hunter asks for permission to hunt and it is granted, and the owner fails to warn him of any danger, liability for injury may result.

C. The owner of animals has a duty to keep them fenced in to avoid trespass. So if one does not properly confine his animals, he can be held liable for the damage they cause another, regardless of whether the injured party has his own property fenced.

D. If animals driven along a road get out of control and enter adjoining fields, their owner can be held liable, even though the road is not fenced.

E. When animals wrongfully enter the property of another, their owner can generally be held liable for the damages which may reasonably be expected to result. Crop injury, injury to persons, injury to other livestock, injury to property, spreading disease and service of female animals by trespassing male animals are the most frequent types of damages.

F. A right accorded by most state laws is that permitting the confinement, watering, feeding, and caring for trespassing animals until the owner comes and takes them, making good any damage suffered. The owner must be notified immediately and the cost of feed and care during the confinement must be paid by the owner.

G. Estrays (domestic animals of unknown ownership running at large - except dogs, cats or poultry) may be confined and cared for by an injured party. A reasonable attempt must then be made to locate the owner through notices in paper - if owner comes for animal, he must satisfy the claims of the taker-up for feed, housing, care and other costs involved. If the owner does not claim his animals, they become property of the taker-up unless state laws provide for sale of the animals and reimbursement of the taker-up.

INFORMATION SHEET

H. Fence laws

1. When two or more persons shall have lands adjoining, each of them shall make and maintain a just proportion of the division fence between them. Owners ordinarily assume the responsibility for a designated one-half of the fence, usually the half on their right as they face the division line when standing on their own property.

2. In most states when an owner of livestock maintains good fences, is not aware that his animals are in the habit of breaking out, does no negligent act causing them to break out, and makes an immediate attempt to retake them when they do break out, he is not liable for damages caused by them.

3. When animals break through an adjoining owner's part of a division fence, and such fence is not in good repair or is not legally sufficient the owner of the animals cannot be held liable for their trespass.

4. An owner of trespassing animals may be held liable.

    (a) When his animals are in the habit of breaking out, regardless of the condition of his fences.

    (b) When his fences are defective or unsufficient.

    (c) When negligence causes the trespass such as leaving gate open.

I. Animals on Highways

1. If a farmer is negligent in maintaining his fences and his animals escape, he can be held liable for damages resulting to persons during the highway.

2. If a farmer maintains his fences in good repair but has one or more animals which he knows are in habit of breaking out, he may be held liable for damages caused by such animals.

3. If adequate fences are maintained in good repair and animals not in the habit of breaking out get through fence and onto a highway, the owner maybe held liable for damages caused if he knew the animals were out and made no reasonable effort to get them back in.

INFORMATION SHEET

4. Animals driven along, across or on a highway, the basis of a farmer's liability is negligence, and if he is careful, he is much less likely to suffer liability. If farmer is not negligent, it is possible for him to recover value of his animals from negligent motorist.

IX. Laws Affecting Kansas Seed and Crop Production

A. Kansas has a noxious weed law which was passed by Kansas legislators.

B. The law states it is the duty of persons, association of person, the state highway commission, the board of county commissioners, the governing body of incorporated cities, railroad companies, and other transportation companies or corporations or their authorized agents and those supervising state-owned lands to control the spread of and to eraduate all weeds declared by legislative action to be noxious on all lands owned or supervised by them and to use such methods for that purpose at such times as are approved and adopted by the state board of agriculture.

C. Kansas has designated these weeds as noxious: Field bindweed, russian knapweed, hoary cress, Canada thistile, quackgrass, leafy spruge, bus ragweed, pignut, Johnson grass and musk thistle.

D. County commissioners townships boards and city officials have the power to cooperate with landlords in their respective jurisdiction in the treatment and eradication of weeds, which have not been declared noxious by legislative action. Chemicals and labor used in the treatment of weeds as authorized shall be supplied by the county, township or city to the landowners at acutal cost, and equipment and machinery so used shall be charged at the actual cost of operation.

E. Weed supervisors are appointed by governing groups to aid in the eradication of noxious and other weeds.

F. Unlawful to dispose of any screening or offal material containing noxious weed seed unless it has been processed by grinding or other adequate measures and the viability of all such weed seeds therein destroyed.

G. Unlawful to barter to give away nursery stock, plants, packing material, animal fertilizer and soil or sod for landscaping or fertilizer uses which contain or is inferted with noxious weed plants material or seeds.

INFORMATION SHEET

H. It is unlawful to bring any harvesting or threshing machinery, portable feed grinders, portable seed cleaners, or field ensilage cutters or other farm vehicles or machinery into the state without first cleaning such equipment free from all weed seed and litter. Machines must also be cleaned when moving from field or farm infested with noxious weeds.

I. Unlawful to sell or offer for sale, barter or give away any livestock feed material which is infested with seeds of noxious weeds unless such feed material shall first have been processed and the viability of all noxious weed seeds present therein destroyed.

J. Unprocessed livestock feed that contain noxious weed seed must be fed on premises where grown, or if purchased it must be processed to destroy the viability of all such weed seeds.

K. Authorized personnel have free access to enter upon premises and to inspect property, both real and personal, regardless of location, in connection with the administration of the state weed law.

L. County weed supervisor has legal compulsory eradication procedures as set up in the Kansas noxious weed laws to eradicate and control the noxious weeds. The cost is born by the landowner.

M. Kansas crop improvement association handles the certification of the varities of seed grown for resale in Kansas. They set up the rules and regulations to grow such seed. They hire inspectors to inspect the crop before harvest. Samples of the harvested crop are sent into a laboratory to check for purity, germination and freedom from weed. Seed that meet the standards can be sold for certified seed.

X. The Kansas Pesticide Laws and Regulations Effecting Field Crop Chemicals

A. Secretary of agriculture is authorized and empowered to administer and enforce the provision of the pesticide law and regulations. He is authorized to promulgate rules and regulations designating certain pesticides as restricted use pesticides. He can make any additional changes in the classification of restricted use pesticides.

B. Applicator certificate maybe obtained by paying a fee, passing a written state examination showing that the applicant possesses adequate knowledge concerning the proper use and application of pesticide in the categories for which they applied.

INFORMATION SHEET

C. Training schools and training materials are provided by state board or agriculture and the county extension office.

D. Surety or liability insurance is required for pesticide business license.

E. Commercial applicator's certificate is needed to apply restricted use pesticides.

F. Private applicator's certificate may be applied for paying $15.00 and passing a test be issued a certificate to the individual using restricted use pesticides for the purpose of.

   1. Producing any agricultural commodity.

   2. On property owned or rented by the individual or his or her employer.

   3. On the property of another for no compensation other than trading of personal services between producers.

   4. Controlling ornamental shrubbery or turf pests on property owned or rented by the individual and such property is used as the individual's residence.

G. Farmers may apply chemicals without a certificate if they are not using restricted chemicals.

H. Each pesticide business shall present a written statement or contract of services to customer. There records must be made available to secretary of agriculture.

J. Action for damages - In order to maintain a civil action, a person damaged from pesticide application shall have filed with the county attorney of the county in which the damage occurred, a written statement, on a form prescribed by the secretary, claiming that he or she has been damaged.

K. Supervision of non-certified applicator. A non-certified applicator of restricted use of pesticides shall be considered to be under the supervision of a certified commercial applicator when both are stationed at and work from the same business address. Certified applicator must provide the non-certified applicator with detailed instructions in the handling and application of the pesticide being used. Certified applicator must be in communication with non-certified applicator.

INFORMATION SHEET

XI. The Four Times a Pesticide Applicator Should Read the Label

A. Before he buys the pesticide.

B. Before he prepares the pesticide.

C. Before he applies the pesticide.

D. Before he stores or disposes of the pesticide.

XII. The Seven Safety Checks to Prevent Accidents While Using Pesticides (Transparencies #1, 2, 3 & Assignment Sheet #2)

A. Store your pesticides safely.

B. Keep in the original container so label is there.

C. Use the recommended clothing and clean spray clothing.

D. Spills and splashes of concentrates can be very hazardous if not looked after.

E. Poor containers may cause bad accidents.

F. Attractive nuisance can result in lawsuits.

G. Care in application prevents accidents.

XIII. The Seven General Precautions for Herbicidal Safety

A. Always read and follow label instructions.

B. Keep out of reach of children and animals.

C. Avoid contamination of feed and foodstuffs.

D. Wash clothing and equipment after application.

E. Do not contaminate fertilizer, seeds, or other pesticides.

F. Do not contaminate fertilizer, seeds, or other pesticides.

G. Keep containers tightly closed and store in a cool place.

INFORMATION SHEET

XIV. The Five Regulations Affecting Control of Feedlots

A. Feedlots in Kansas having 1,000 head or more of cattle, sheep, swine or horses on hand at any one time are required annually to receive a license from State Livestock Sanitary Commission.

B. Feedlot is less likely to be held liable for damages to a neighbor if he initiated his operation before such neighbor moved into thenearby residence.

C. Injunction lawsuit may be made by a complaining party for damages. Feedlot owner can make certain basic changes in a temporary nuisance lawsuit and satisfy the neighbors. The feedlot owner maybe sued every year over some complaint.

D. Permanent nuisance is one that can not be relieved and a lawsuit will once and for all settle the suit. The feedlot owner can not be sued again by the same person.

E. Livestock operators, will come under the State Department of Helath, if they have 300 head or more at any one time. Using any confinement operation with a lagoon, any feeding operation having water pollution.

XV. The Laws Affecting Irrigation and Water Rights

A. A riparian (ownership of land bordering on a stream) owner is entitled to reasonable use of water for irrigation not injurious to lower riparian owners.

B. The right to take water may be acquired by contract, license, long-continued use, or by virtue of riparian ownership.

C. The right is not confined to flowing waters but may be exercised in a pond or other still body of water.

D. Generally only riparian land in the same watershed as the stream is entitled to water from the stream.

E. There are some small streams from which all the water is needed for normal livestock and domestic purposes. In this case water from the streams can not be used for irrigation.

F. The courts use many tests to determine how much water a riparian owner may use for irrigation purposes. In the end each case is determined on the basis oi reasonableness.

G. The right to use a stream for irrigation purposes may be lost by abandonment and non-use.

INFORMATION SHEET

H. Irrigation districts are public corporations created by law for the purpose of facilitating the irrigation of land within the district at a uniform rate and without discrimination.

I. Permits for water appropriation or rights to pump water from ground or stream are obtained from State Water Resource Board, State Board of Agriculture, Topeka, Kansas. They are filed in the county register of deeds office.

J. Amount of water pumped must be recorded and sent in yearly to State Water Resource Board.

K. Irrigation water must be kept under control by the landlord or tenant and they are responsible for any resulting damages.

L. Temporary permits. Subject to existing water rights and the principles of beneficial use, temporary permits to appropriate water may be obtained. They will be granted for six months. Extension may be granted, but temporary permit gives the holder no permanent right to appropriate water.

M. Domestic user does not have to apply for and obtain a permit to appropriate water. "Domestic user" means the use of water by any person or by a family unit or household for household purposes for the watering of livestock, poultry, farm and domestic animals used in operating a farm and for irrigation of land not exceeding two acres for growing gardens, orchards and lawns.

N. A person may divert and use water impounded in any reservoir for beneficial purposes in a quantity not exceeding fifteen acre feet per year without applying for or obtaining a permit to appropriate water.

XVI. Six Ways of Figuring Interest Between Borrower and Lender (See Job Sheet)

A. Simple interest - The principle is multiplied times annual interest rate times the exact number of days used divided by 365 days in a year. Simple ordinary interest uses 360 days in a year.

INFORMATION SHEET

B. Compound interest - The principle is multiplied times annual interest rates times the fractional part of the year that is being compounded. If the borrower cannot pay his interest when it is due the interest due is added into the principle and the new principle balance will include interest that was due. The process of figuring interest begins all over again. This can be figured annually, semi-annually, quarterly, or even daily.

C. Interest rate applied on unpaid monthly balance (credit cards) - Simple ordinary interest is figured on unpaid balance each month. If the credit card holder does not make large enough payment, the monthly interest is added into remaining balance for next month. This is the same as compounding the interest on the account.

D. Add-on rate - (consumer types loans for cars) - Simple interest is figured on principle borrowed. The interest is added into the principle. The total of the princple plus interest are divided by the number of months. This will give the monthly payments due on the loan. The borrower will be paying interest on original amount of principle borrowed regardless of how much he pays on the principle and interest each month. Financial institutions by federal law must disclose annual percentage rates (APR) on consumer loans. This APR is different than the simple interest rate.

E. Focal interest (form of simple interest) used by Federal Intermediate Credit bank and Commercial bank as line of credit not - A farmer obtains a loan and signed a note for the principle amount of Jan. 1. The bank will figure simple interest only on the amount of money he takes out of his loan to Dec. 31. The bank figures simple interest on all money the borrower actually receives from his loan due on Dec. 31. Any repayment money applied toward the debt will have the interest figured to Dec. 31. The interest on the repayment will be subtracted from the Dec. 31 total. This allows the borrower to be charged for interest only on the exact amount of money he had borrowed and the exact number of days he uses it.

F. Interest paid in advance (Bank discount note). Simple interest is figured on the principle of the note and is subtracted from the amount of the principle the borrower will receive. The borrower must pay back the original amount of the note even though he did not get to use the full amount of the loan.

Common Facts to Remember About Pesticide Use

A

SAFETY EQUIPMENT CHECKLIST

____ tightly woven COVERALL type garment.

____ waterproof, *lined/unlined,* neoprene BOOTS

____ waterproof, unlined, *neoprene/cotton* GLOVES

____ waterproof, *narrow/wide* brimmed HAT

____ EYE GOGGLES and/or RESPIRATOR (either canister or cartridge type

B

CARE & CLEANING OF CLOTHING & EQUIPMENT

- clothing worn for pesticide work should be cleaned with detergent and water after *each/every other* use.

  NOTE: If clothing gets wet from pesticide concentrates or highly toxic pesticides–REMOVE IMMEDIATELY AND DESTROY.

- the face piece and or goggles must be washed after *each/every other* use with detergent and water.
- the cartridge and canister filters must be changed *weekly/daily* or more often, if you can smell vapors.

C

TRANSPORTING PESTICIDES

- the safest place to carry pesticides is in the *front/back* of a truck.

  NOTE: They should be *tied down* or otherwise *secured,* so they will not move or change position.

D

STORING PESTICIDES

- You should keep pesticides stored in a building that has:
  - a *lock/no lock* on the door (unlocked pesticides should never be left unattended).
  - a *cement/dirt* floor.
  - been made with *flammable/fire resistant* materials.
  - good *plumbing/lighting* and ventilation.
- Pesticides should be stored in THE ORIGINAL LABELED CONTAINERS OR IN A CONTAINER THAT HAS HELD EXACTLY THE SAME PESTICIDE.

E PRECAUTIONS FOR MIXING & LOADING

- Wear the proper protective CLOTHING.
- Keep PEOPLE, pets, and livestock out of the mixing area (however, it may be safer to have one other person with you).
- Mix *indoors/outdoors.*
- Stand so the wind blows *towards/across* your body from right or left.
- READ THE *almanac/label* for proper directions BEFORE you start.

F PRECAUTIONS TO TAKE BEFORE APPLYING

- do not apply pesticides when there is a *weak/strong* wind, which may cause the pesticide to *drift* out of the target area.
- keep sprayer pressure near the *minimum/maximum* level in order to reduce the possibility of *drift.*
- spray during the *cool/hot* part of the day to reduce the possibility of *vapor drift.*
- be sure you *will/will not* exceed the approved residue or *tolerance* level.
- be sure to determine the interval to harvest in *pounds/days* before applying a pesticide.

G PROCEDURES FOR PESTICIDE SPILLS

- If pesticides are accidentally spilled:
  - try to *confine/spread* the spill by building a dike around the spill with sand, sawdust or soil.
  - *permit/prevent* entry of people, pets, and livestock until the spill is cleaned up.
  - once the pesticide is soaked up by the sand, sawdust or soil—shovel it into a leakproof container for *re-use/disposal* in a special pesticide landfill area.

NOTE: If the spill occurs on a public street or highway try to contain it immediately (see above) and contact the proper local authorities.

H

DISPOSAL OF EMPTY CONTAINERS

All pesticide containers must be *re-used/burned* or *re-used/destroyed* after use.

- **glass, plastic, and metal containers should be triple-rinsed and punctured or broken before *burying/re-using*.**
- **bury at least *6/18* inches below the surface.**
- **small numbers of paper pesticide containers may be *thrown/burned* in open fields, if local regulations permit.**

I

FIRST AID

- *if you get pesticide on your skin*, remove it by washing with *detergent/soap* and water.

  NOTE: pay careful attention to washing your hair and under your fingernails.
- *if you inhale a pesticide*—get to fresh *water/air* immediately—then call a *doctor/friend*.
- *if you splash a pesticide in your mouth or swallow it*—wash your mouth out with several glasses of water—get to or be taken to a *bed/doctor* right away.
- *if a person has been poisoned, he should be watched constantly/occasionally or he may die* (symptoms rarely appear more than 12 hours after exposure)

  NOTE: If you have to go for a doctor, leave the poison victim with *no one/someone* else to watch him.

  NOTE: If you take a person to the doctor because of suspected pesticide poisoning TAKE THE PESTICIDE *equipment/label* OR *container/protective clothing* WITH YOU.

J

SYMPTOMS & SIGNS OF POISONING

MILD	MODERATE	SEVERE
Fatigue	Unable to Walk	Unconsciousness
Headache	Weakness	Severe Construction of Eye Pupil
Dizziness	Chest Discomfort	Muscle Twitches
Excessive Sweating & Salivation	Muscle Twitches	Secretions From Mouth or Nose
Nausea & Vomiting	Construction of Pupil of the Eye	Breathing Difficulty
Stomach Cramps or Diarrhea	Earlier Symptoms Become Severe	Death If Not Treated

K

EMERGENCY NUMBERS

	NAME	PHONE NBRS.
SHERIFF		
DOCTOR		
DOCTOR		
HOSPITAL/EMERGENCY		
FIRE STATION		
EXTENSION AGENT		
POISON CONTROL CENTER		
COUNTY HEALTH OFFICIAL		
DEPARTMENT OF AGRICULTURE		

RISK MANAGEMENT

UNIT II

ASSIGNMENT SHEET #1: Points to be Considered in Contracts Affecting Farmers

Students check home farms on areas that apply to them.

A. Purchase seed

1. Variety __________
2. Viability (germination test) __________
3. Percent of weed seeds and foreign matter __________
4. Free from the state noxious weed __________
5. Locality where produced __________
6. Scarified or unscarified __________
7. Cleaned and treated for disease __________
8. Sacked or bulk __________
9. Weight __________
10. Price __________
11. Time, place and cost of delivery __________
12. Meet state seed laws __________
13. Reliable dealer __________
14. Financial terms __________

B. Purchase of fertilizer

1. Reliable dealer __________
2. Percentage of each ingredient __________

ASSIGNMENT SHEET #1

3. Delivery date ____________
4. Financial terms ____________

C. Purchase of feed

1. Contents of essential nutritive elements ____________
2. Sacked or bulk ____________
3. Withdrawal date of drugs ____________
4. Warranties accompanying the purchase ____________
5. Statements made by feed salseman valid ____________
6. Feed tag available ____________
7. Delivery date ____________
8. Method of delivery ____________
9. Financial terms ____________

D. Sales of livestock

1. Sale by head or weight ____________
2. Kind or grade of animal the seller must furnish ____________
3. Warranties that exert in favor of the buyer - Example disease free, not sterile ____________
4. Price the seller shall receive ____________
5. Method of weighing (on truck or off truck) ____________
6. Time of day to weigh ____________
7. Percent of shrinkage allowed ____________

ASSIGNMENT SHEET #1

8. Sale barns and feedlots protected by uninformed livestock and stockyard act ________________

9. Financial terms ________________

E. Feeding and pasturing livestock

1. Specify how the animals will be handled ________________

2. Share the expenses will each be responsible for ________________

3. Provision for shrinkage and death loss ________________

4. Division of profit ________________

   a. Based on the investment by each party ________________

   b. Gain put on the animals ________________

   c. Grower furnishes animals and pays feeder for his fee, labor, use of equipment and other expenses ________________

   d. Cost per lb. of gain to owner ________________

5. Financial terms ________________

F. Renting of permanent, wheat pasture, crop stocks

1. Date to begin and end pasture ________________

2. Cost per head or acre ________________

3. Maximum number of head allowed ________________

4. Responsibility for fence ________________

5. Responsibility for water ________________

6. Responsibility for checking cattle daily ________________

ASSIGNMENT SHEET #1

7. Responsibility for salt and mineral ______________
8. Marking of animals ______________
9. Financial terms ______________

G. Selecting a commercial feedlot

1. Business organization ______________
2. Proven management ______________
3. Date of purchase ______________
4. How to purchase ______________
5. Where to purchase ______________
6. Number of head ______________
7. Breed to purchase ______________
8. Steers or heifers ______________
9. Purchase weight ______________
10. Method of transportation ______________
11. Yarding charges ______________
12. Feed charges ______________
13. Ration to be fed ______________
14. Length of feeding time ______________
15. Health care ______________
16. Death loss ______________
17. Method of payment for feed and services ______________
18. Markets available ______________
19. Responsibility for sale ______________

ASSIGNMENT SHEET #1

20. How to be sold ______________
21. Method of weighing ______________
22. Shrinkage allowance ______________
23. Guarantees ______________
24. Financial arrangements ______________

H. Conditional Sales

1. Purchase price ______________
2. Trade in allowance ______________
3. Delivery date ______________
4. Interest rate ______________
5. Service charge ______________
6. Due date for payments ______________
7. Amount of each payment ______________
8. Warranties as guarantees (in writing) ______________
9. Service contract ______________

I. Custom Work

1. Total cost ______________
2. How cost is to be determined (bushel, ton, acre) ______________
3. When will work be done ______________
4. How will work be done (ex., depth to plow size and weight of bales) ______________
5. Who will secure and pay for any extra help needed ______________
6. When will job be paid for ______________
7. Trucking charges (miles included in cost per bushel) ______________

ASSIGNMENT SHEET #1

J. Service of Male Animals

1. Some states owner of sire is given a lien against dam and per progency until he is paid for service ________________

2. Whether sire will brought to the farm or dam taken to the sire ________________

3. An understanding with respect to return service ________________

4. The charges for service and when they are to be paid ________________

RISK MANAGEMENT

UNIT II

ASSIGNMENT SHEET #2: A Checklist for Preventing Pesticide Accidents

Students check their own farm use of pesticides.

	Yes	No
Store Your Pesticides Safely		
Do you have a separate space to store pesticides?		
Do you keep it locked and are the windows tight, barred, or boarded over?		
Do you keep all your pesticides in this storage rather than in the garage, feed room, basement, porch, kitchen, or refrigerator?		
Do you store herbicides separately from other pesticides?		
Are there signs on your storage so fireman and others are warned?		
Do you check periodically for leaking containers?		
Keep in the Original Container so the Label is There		
Do you always keep pesticides in the original container instead of old "coke" bottles, milk cartons, or other food containers?		
When people ask you for a little spray mix out of your tank do you refuse?		
Do you always remember what is in an unlabeled container?		
Do you always remember the safety precautions, antidotes, and directions for use, even though the container is not labeled?		
Do you safely dispose of unlabeled pesticides rather than take a chance with your memory?		

ASSIGNMENT SHEET #2

Use the Recommended Clothing and Protective Equipment	Yes	No
Do you read the label to see what protective clothing you should wear?		
Do you start each spraying day with clean spray clothing?		
Do you check the signal words and precautions for use on the label to see what protective equipment is necessary?		
Do you wear the protective equipment recommended on the label?		
Do you clean and maintain your protective equipment regularly and often?		
Do you throw away rubber gloves that have only tiny holes in them?		
Spills and Splashes of Concentrates can be Very Hazardous		
Do you know what to do if you should spill a pesticide on yourself while mixing?		
Do you wear adequate footgear with your pant cuffs on the outside so pesticides won't run into your footgear?		
Do you have sawdust, vermiculite, kitty litter, or some other absorbent on hand to soak up spills?		
Do you always watch your sprayer tank when filling so it won't run over and spill on the ground?		
Do you have a check valve or other device on your equipment to prevent back-siphoning into the water supply?		
Is your application equipment well maintained so it doesn't leak and leave toxic puddles or piles of pesticide on the ground?		
Do you avoid draining leftover spray mix on the ground?		

ASSIGNMENT SHEET #2

	Yes	No
Do you discard old high pressure hose instead of patching it and hoping no one will be nearby when it bursts?		
Do you clean nozzles with a brush or by rinsing instead of blowing them out with your mouth?		
Poor Container Disposal May Cause Bad Accidents		
Do you rinse each "empty" liquid container at least three times and dump the rinsings into the tank?		
Do you keep your used containers in your storage area until disposed?		
Do you collect every container for disposal before leaving a job instead of leaving them in the field or at your tank filling station?		
Do you buy them in a special landfill or store them until you can.		
Do you buy punctured rinsed containers 18 inches below surface of soil where they will not pollute surface or subsurface run off?		
Do you puncture, break, or crush nonburnable containers so they can't be reused?		
Do you keep or return to the manufacturer 30 and 55 gallong pesticide drums, rather than giving them away for floats or trash barrels?		
Attractive Nuisances Can Result in Lawsuits		
Do you keep your spray equipment where children cannot play on it?		
Do you keep your spray equipment clean so that those touching it will not be contaminated?		

ASSIGNMENT SHEET #2

	Yes	No
Do you always release pressure on your equipment so spray guns won't be accidently triggered?		
Care in Application Prevents Accidents		
Do you check the wind direction and the area downwind before applying pesticides?		
Do you consider substituting a safer chemical if you are spraying near a sensative area?		
Do you check for the possibility of showers and damaging runoff before applying pesticides?		
Do you plan your pesticide application so it will have little or no effect on bees, birds, fish, or other wildlife?		
Do you remove, turn over, or cover up pet dishes, sand boxes, and plastic pools before spraying private property?		
Do you make sure that children and pets are out of the area and stay out until the spray dries?		

RISK MANAGEMENT

UNIT II

ASSIGNMENT SHEET #3: Ways to Figure Interest

A. Simple accurate interest

Example - $1,000 borrowed at 10% for 365 days

Formula - Principle X Rate X $\frac{\text{Exact number of days}}{\text{365 days in a Year}}$ equals interest due

$1{,}000 \times .10 \times \frac{365}{365} = \$100.00$

B. Compound interest (semi-annually)

$1,000 borrowed @ 10% for ½ year

1000 x .10 x ½ = $50

Borrower could not pay interest of $50.00

$1,000 plus $50.00 = $1,050.00 new principle amount

$1,050 x .10 x ½ = $52.50

$1,050 + $52.50 = $1,102.50 the amount due at the end of one year.

C. Unpaid monthly balance

$1,000 owed on credit card 1st February

18% annual interest rate on unpaid balance

Borrower paid $500.00 on account $1,000 - $500 = $500

$500 x 18% x 1/12 = $7.50

$7.50 equals interest to be added to principle for next month.

$500 principle plus $7.50 interest equals $507.50 principle due 1st of March plus any additional purchases during the month.

ASSIGNMENT SHEET #3

D. Add-on interest

$5,000 principle borrowed for new car @ 7.5% add-on-interest for 48 months.

$\$5{,}000 \times 7.5\% \times \frac{48}{12} = \$1{,}500$

$5,000 principle plus $1,500 interest due over 48 months equals $6,500 total.

$6,500 divided by 48 months equals $135.42 monthly payments for 48 months.

E. Focal interest

$5,000 borrowed Jan. 1st @ 10% interest rate

$\$5{,}000 \times 10\% \times \frac{364}{365} = \$498.68$ interest due Dec. 31.

$1,000 additional money borrowed on March 1.

$\$1{,}000 \times 10\% \times \frac{306}{365} - \$83.84$ interest until Dec. 31.

Total amount interest due Dec. 31 is now $582.47.

Borrower paid off $800.00 on 1st of July.

$\$800 \times 10\% \times \frac{184}{365} = \$40.33$ interest to subtract off Dec. 31 total of $582.47.

Total interest now due on Dec. 31 is $542.14.

All further withdrawals and money paid back will have interest figured until Dec. 31 and will add or be subtracted off December total.

F. Interest paid in advance

$1,000 borrowed @ 10% for 1 year

$\$1{,}000 \times 10\% \times 1 = \$100$ interest due at end of the year.

$1,000 minus $100 - $900 the amount the borrower will receive and he must pay back $1,000 at the end of the year.

RISK MANAGEMENT

UNIT II

TEST

1. Match the following definitions on classifications of law affecting farmers with the terms on the right.

_____a. International

_____b. Constitutional

_____c. Statutory

_____d. Common Law

1. Federal and state constitution passed by the governing bodies.

2. Opinions of judges deciding cases over the years.

3. Laws passed by the governing bodies.

4. Treaties and reciprocal trade pacts are formed in which agriculture has a great interest.

2. Identify the four sources of law.

a.

b.

c.

d.

3. Identify the six sources who influence the making of laws.

a.

b.

c.

d.

e.

f.

TEST

4. Identify the six sources where to find the laws in force.

   a.

   b.

   c.

   d.

   e.

   f.

5. Match the following definitions of legal classification of contracts with terms on the left.

_____a. Quasi or Constructive	1. Agreements arrived at directly by word of mouth or writing.
_____b. Implied	2. Parties create mutual obligation without actually entering into verbal or written agreement.
_____c. Express	3. Obligations created by law where justice demands that one party should compensate another for benefit received.

6. See Assignment Sheet

7. True or False - Write true or false in the space provided at the left, concerning laws affecting farm leases between landlord and tenant.

   ________a. Oral leases for more than a year are voided.

   ________b. Written leases are just for a year.

   ________c. Tenants who remain after a written lease expires are normally tenants from year to year.

   ________d. Termination notice is not necessary with a valid lease for a specific time.

   ________e. Thirty day notice in writing is necessary to tenant before year to year lease is terminated.

TEST

________f. February 1 is the legal termination date for year to year leases.

________g. Notice of termination must be as the law states and can be served with registered mail.

________h. Leases of less than two years can be transferred by tenant to another person.

________i. A valid sublease to a new tenant is binding on landlord.

________j. A landlord can not sell his farm without tenants consent.

________k. A lease is not binding on heirs of the deceased landlord or tenant.

________l. A lease from a landlord owning only a lifestate terminates with his death, except to crops already planted.

________m. Landlord may not sue to prevent or collect damage for waste.

________n. Landlord owns share of crop (after division payable as rent.)

________o. Any rent due for land is a lien in the crops as no filing or writing is required.

________p. Owner of pasture land who leases or rents them exclusively for pasture does not have a first lien on cattle if pasture rent is not paid.

________q. A landlord may recover rent due him from a purchaser with notice of lien.

________r. A landlord can not attack the tenant's property if the rent owned him is endangered.

________s. A lease may not be terminated if tenant fails to pay rent when the tenant is given a 10 day written notice.

________t. A tenant may waive exemption laws for debts contracted for rent.

________u. Fishing and hunting licenses are required to owner of land, or tenant, or his immediate family.

TEST

________v. A tenant may remove improvements on land if lease does not prevent it.

________w. A tenant may harvest crops after the specified term is up.

________x. Landlord's right to entry of farm and to hunt should be covered in lease.

8. True or False - Write true or false in the space provided at the left, concerning laws affecting livestock and fences.

________a. A man who has a ferocious animal may be held liable unless the person injured was negligent.

________b. A hunter who has been granted permission to hunt and the owner fails to warn him of any danger will become liable for injuries which may result.

________c. The owner of animals has no duty to keep the animals fenced in to avoid trespass and will not be held liable if animals do damage.

________d. Owner can not be held liable for animals being driven along road and get out of control.

________e. Owners can be held liable for animals who wrongfully enter the property of another.

________f. The owner of animals who wrongufllly enter the property of another may be confined until the owner comes and gets them. The owner must pay damages and feed costs.

________g. Estrays may be confined by the injured party. After a reasonable attempt to locate owner, the estray can be claimed by the party taking care of the animal unless state law prevents it.

________h. Adjoining land owners ordinarily assume the responsibility for a designated one-half of the fence, usually the half on their right.

________i. If a farmer keeps his fences in good repair and his animals seldom get out, this farmer can be held liable for damages caused if he knew the animals were out and made no reasonable effort to get them back in.

TEST

9. True or False - Write true of false in the space provided at the left, concerning laws affecting Kansas seeds and crop production.

________a. Kansas does not have a noxious weed law.

________b. Legislative bodies in the state of Kansas are designated by law to control noxious weeds.

________c. Kansas has designated 20 weeds as noxious.

________d. County commissioners and city officials can cooperate with landowners and help them eradicate the noxious weed.

________e. Weed supervisors are appointed by governing groups to aid in the eradication of noxious and other weeds.

________f. It is lawful to barter or give away animal fertilizer, soil and sod that maybe infested with noxious weeds.

________g. It is lawful to dispose of any screening containing noxious weeds without grinding.

________h. Harvesting machines brought in from out of state do not need to be cleaned.

________i. Livestock feed that is infested with noxious weeds must be processed and all noxious seeds destroyed before it can be sold.

________j. Unprocessed livestock seed containing noxious weeds must be fed on premises where grown.

________k. Weed supervisors and authorized personnel must seek permission to enter premises to inspect property for noxious weeds.

________l. County weed supervisor has legal authority to enter one's property that refuses to control noxious weeds and cost is assessed to land owner.

________m. Kansas crop improvement association sets up the rules and regulations to regulate the pure seed certification.

TEST

10. True or False - Write true or false in the space provided at the left, concerning laws and regulations affecting field crop chemicals.

________a. Secretary of agriculture is authorized and empowered to administer and enforce the provision of the pesticide law and regulations.

________b. Applicator certificates are obtained just by paying a fee.

________c. The trainee must train himself.

________d. Surety bonds are required to apply restricted use chemicals.

________e. Commercial applicators do not need applicator's certificate for restricted use pesticides.

________f. Private applicators need to have certificate to apply restricted use pesticides.

________g. Farmers need a certificate to apply non-restricted chemicals.

________h. Written statements and service records need to be available for secretary of agriculture.

________i. Commercial applicators do not need to mark their equipment.

________j. Civil action suits need to be filed with county attorney of the county where damages occured.

________k. Non-certified applicators need not be in communication with certified applicator.

11. List four times a pesticide applicator should read the label.

a.

b.

c.

d.

TEST

12. List the seven safety checks to prevent accidents.

    a.

    b.

    c.

    d.

    e.

    f.

    g.

13. List the seven general precautions for herbicidal safety.

    a.

    b.

    c.

    d.

    e.

    f.

    g.

14. Discuss five regulations affecting pollution control of feedlots.

    a.

    b.

    c.

    d.

    e.

TEST

15. True or False - Write true or false in the space provided at the left, concerning laws affecting irrigation and water rights.

________a. Land owner is entitled to reasonable use of water on land bordering streams.

________b. Water rights are acquired by contract, license, and long-continued use.

________c. Rights for water are confined only to flowing water.

________d. Generally only riparian land in the same watershed as the stream is entitled to water from the stream.

________e. Water in small streams needed for livestock can not be used for irrigation purposes.

________f. Courts use many tests to determine how much water can be used for irrigation purposes. In most cases it is determined on the basis of reasonableness.

________g. Abandonment and non use are not a basis for loss of right to water for irrigation purposes.

________h. Farmers in a water district are entitled to this water without discrimination.

________i. Permits for water appropriation comes from county courthouse.

________j. There is no need to record amount of water used each year for irrigation.

________k. Irrigation water does not need to be kept under control.

________l. Temproary water permits are granted for six months.

________m. Domestic users must apply for water permits.

________n. Water impounded in more than 15 acre feet must have a permit.

16. Name the six ways interest can be figured.

a.	d.
b.	e.
c.	f.

RISK MANAGEMENT

UNIT II

ANSWERS TO TEST

1. a. 4
   b. 1
   c. 3
   d. 2

2. a. Custom
   b. Lawmaking bodies
   c. Judges
   d. Administrative

3. a. Individuals
   b. Outside agencies
   c. Private groups
   d. Legislative committees
   e. Legislatures
   f. Lobbyist or pressure groups

4. a. Lawyers
   b. Law books
   c. Statutes
   d. Articles in newspapers and magazines
   e. Elected officials
   f. Federal, state, county, and city officials

5. a. 3
   b. 2
   c. 1

ANSWERS TO TEST

6. Assignment Sheet #1

7. a. true
   b. false
   c. true
   d. true
   e. true
   f. false
   g. true
   h. false
   i. true
   j. false
   k. false
   l. true
   m. false
   n. true
   o. true
   p. false
   q. true
   r. false
   s. false
   t. true
   u. false
   v. true
   w. false
   x. true

8. a. true
   b. true
   c. false
   d. false
   e. true
   f. true

ANSWERS TO TEST

g. true
h. true
i. true

9. a. false
b. true
c. false
d. true
e. true
f. false
g. false
h. false
i. true
j. true
k. false
l. true
m. true

10. a. true
b. false
c. false
d. true
e. false
f. true
g. false
h. true
i. false
j. true
k. false

ANSWERS TO TEST

11. a. Before he buys the pesticide
    b. Before he prepares the pesticide
    c. Before he applies the pesticide
    d. Before he stores or disposes of the pesticide

12. a. Store your pesticides safely
    b. Keep in the original container so label is there
    c. Use the recommended clothing and clean spray clothing
    d. Spills and splashes of concentrates can be very hazardous if not looked after
    e. Pour containers may cause bad accidents
    f. Attractive nuisance can result in lawsuits
    g. Care in application prevents accidents

13. a. Always read and follow label instructions
    b. Keep out of reach of children and animals
    c. Avoid contamination of feed and foodstuffs
    d. Wash clothing and equipment after application
    e. Do not contaminate water used for irrigation or domestic purposes
    f. Do not contaminate fertilizer, seeds, or other pesticides
    g. Keep containers tightly closed and store in a cool place

14. a. Annual license is needed from State Livestock Sanitary Commission for lots having 1,000 head or more of livestock.
    b. Feedlots can be held liable for damages to neighbors.
    c. Neighbors can file injunction law suits against feedlot owner and can be sued more than once.
    d. Permanent nuisance law suits by neighbors are usually settled in court. Only one law suit by each neighbor involved.
    e. Livestock operators with 300 head or more of livestock will come under State Department of Health.

ANSWERS TO TEST

15. a. true
    b. true
    c. false
    d. true
    e. true
    f. true
    g. false
    h. true
    i. false
    j. false
    k. false
    l. true
    m. false
    n. true

16. a. Simple interest
    b. Compound interest
    c. Interest rate applied on unpaid month balance
    d. Add-on rate
    e. Focal interest
    f. Interest paid in advance

FARM BUSINESS CENTER

UNIT I

OFFICE AND FILING SYSTEM

TERMINAL OBJECTIVES

Upon completion of this unit, the student will be able to develop a filing system to use in his own operation and list the advantages of having one. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. List six reasons for having a business office.
2. List four factors to consider when planning a farm business center.
3. List seven pieces of office equipment needed.
4. List three purposes of a filing system.
5. Name four steps in assembling a filing system.
6. List four components of a filing system.
7. Name seven steps in using a filing system.

FARM BUSINESS CENTER

UNIT 1

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information and Assignment Sheets
3. Make Transparencies
4. Provide each farm couple with twenty-five file folders as an incentive to get started
5. Discuss Terminal and Specific Objectives
6. Discuss Information Sheets
7. Give Test

Student:

1. Read Objectives
2. Study Information Sheets
3. Take Test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Transparency Masters

   TM 1 - Three Good Arrangements for Your Business

   TM 2 - Home Filing System

   TM 3 - Farm and Home Filing System

   TM 4 - Where Will You Keep Important Papers?

INSTRUCTIONAL MATERIALS

4. Test

5. Answers to Test

References:

1. Your Home Business Center, Cooperative Extension Service, Kansas State University. (out of print; xerox copies may be obtained from John Schlender, Extension Economics, WA 312)

2. The Farm and Home Office and Filing System, Donald Walker, Unit in Adult Farm Management I, Winena Area Technical School.

3. "Filing Systems for a Farm Business", Doane's Agricultural Report.

4. "Organizing a Home Business Center Can Improve Farm Management", Grass and Grain, Oct. 17, 1978, p. 10.

FARM BUSINESS CENTER

UNIT 1

INFORMATION SHEET

I. Business Office

  A. Reasons for Having an Office

    1. Provides a place to keep valuable papers and material from getting lost

    2. Provides a quiet place to think and work

    3. Makes paperwork easier and faster

    4. Helps prevent legal difficulties and loss of money

    5. Provides a place to meet with customers, salesmen

    6. Serves as a business expense

      a. The room is exclusively used as a full-time farm business office, the expenses of maintaining it are tax deductible

II. Planning a Farm Business Center

  A. Size Needed

    1. It can be very simple, such as a table with drawers and storage shelves above

    2. It may be an elaborate room with wall to wall carpeting and a large walnut desk

  B. Attractiveness of Office

    1. You want it to blend with other furnishings in the room

  C. Location of Office

    1. It should be quite permanent. It doesn't have to be a separate room, but should be a definite part of some room

    2. It should be handy and not upstairs if at all possible

    3. Good lighting, ventilation, and a year round comfortable temperature should be considered

INFORMATION SHEET

4. Location may also be important if a number of business transactions are made during the year. For instance, a purebred livestock breeder may want an office in the house, but accessible from the outside without going through other rooms

5. If the homemaker needs to take phone messages and report accurate information for her husband, she needs the business center near the telephone and her other work

D. Consider the activities of all the family members

E. You may find a need for two centers--one for business affairs, and a second for personal family affairs

III. Office Equipment Needed (TM 1)

A. A good desk and chair. A simple desk can be constructed by use in two 2-drawer files with a table top of some kind for the desk top. The width of the desk can be varied by changing the distance between the two filing cabinets

B. Good lights

C. Book case and magazine rack

D. Filing cabinet

E. Bulletin board or chalkboard to use for reminders

F. Adding machine or calculator

G. Typewriter

IV. Purposes of a Filing System

A. A definite place for materials

B. Save time in finding materials

C. Provides for current transactions and records and materials for a permanent record

1. Locate the current file in a convenient place and organize it so that materials can be found readily

INFORMATION SHEET

2. It should be large enough to hold the necessary records for one year

3. Clean the current file annually and store permanent records in a clean, dry, safe, place

4. Keep papers of lasting value such as mortgages, deeds, or current inventories in a safe deposit box

V. Assembling a Filing System (TM 2)

A. Keep records and references separate in the filing system. References may be kept for several years whereas records change yearly

B. Give consideration to who will use the filing system. If the farm homemaker does the major bookeeping, it will be convenient to combine the farm and home aspects of the business into one filing system

C. File alphabetically rather than by number. It is easier to insert or delete folders without destroying the established filing pattern

D. Build your filing system around the Kansas Farm Account Book and other special record books, such as D.H.I.A., that you use

1. Some account books provide forms for a record of your household possessions

2. If no form is available, you will want to make your own household inventory record for fire insurance purposes

E. Individualize the filing systems

1. You may begin from scratch and develop your own system, or try a system that is already set up and adapt it to your needs

2. Change and adapt an already existing method if it appears to meet most of your needs

VI. Components of the Filing System

A. File cabinet or boxes

B. Manila file folders

1. Available at office supply stores at various prices

INFORMATION SHEET

2. Available in third cut (left, center, and right hand tabs) or fifth cut, which has five different tab positions. The third cut folders are the simplest to use and have more room on the tabs for putting numbers and titles

C. File folder tabs

   1. Special gummed tabs are available for folders
   2. Tabs may be purchased in several different colors and a different color used for each main heading

D. File dividers

   1. These are made of heavy cardboard and separate the various sections or main headings of your filing system

E. Filing index

   1. This is the key to the entire filing system. It lists all the headings and subheadings in the system
   2. The file folder headings should correspond to the index
   3. When materials are to be filed, check the index to determine the best place to file it
   4. Make your index first, then make up folders and tabs to correspond to it
      a. The temptation will be to make up folders and tabs to begin with and attempt to make them up as the need arises
      b. Chances are pretty good that if the folders are not made up in advance, time will not be available when the folders are needed
      c. If, after a period of time it appears that certain folders are not being used, they can be changed by putting new tabs over the old ones
   5. You might want to obtain a transparent plastic envelope to store the indices in

INFORMATION SHEET

VII. Using the System

A. One problem of filing is to know what to file and what to throw away. In any event, the file will have to be cleaned out periodically to discard obsolete and outdated material

B. Be sure everyone that will be using the system understands how it is organized

C. If some folders fill up you may need to subdivide it into other categories or headings

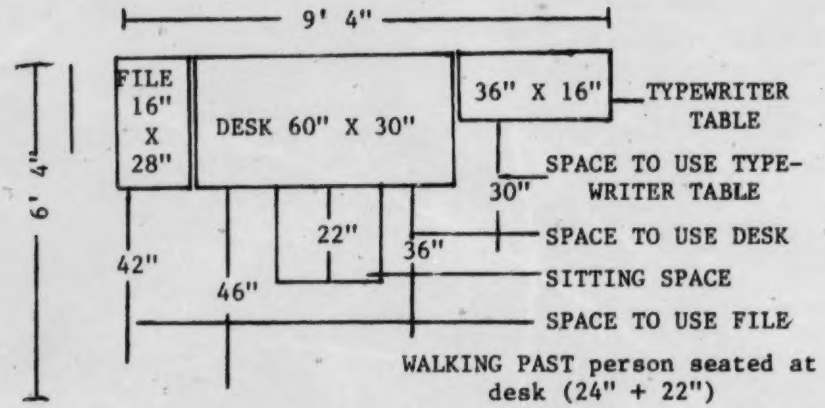
D. When filing materials that could be filed under more than one heading write the file heading at the top of the material to be sure it gets put back in the correct folder

E. Leave four to five inches of "working space" in each file drawer

F. Complete filing procedures daily; do not allow work to pile up

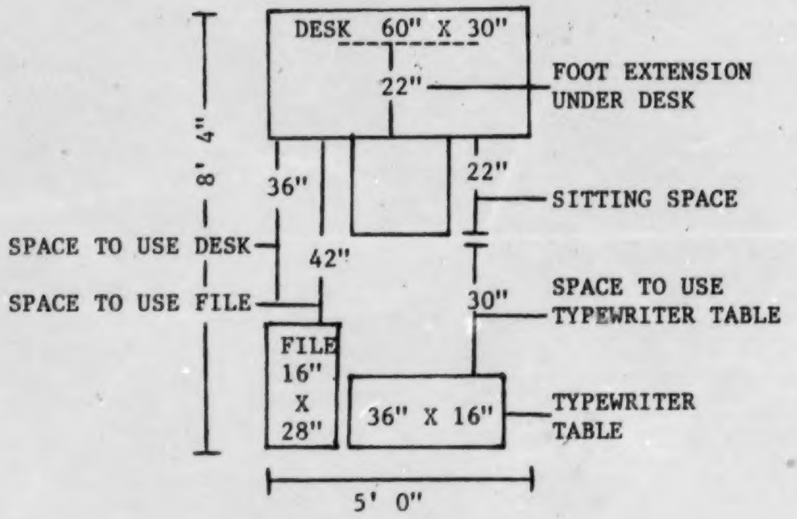
G. Don't pull out more than one file drawer at a time. Each drawer should be closed after use as a simple safety precaution

Three Good Arrangements for Your Business Center



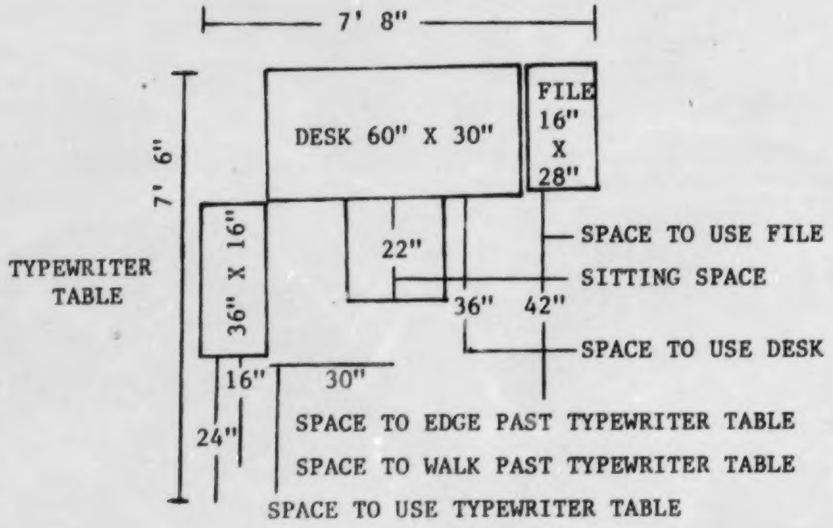
Along One Wall

6'4" x 9'4"



On Parallel Walls

5'0" x 8'4"



Walls At Right Angles

7'6" x 7'8"

HOME FILING SYSTEM

ACCOUNTS AND RECORDS

- ACCOUNT BOOK
- AUTOMOBILE RECORDS
- EQUIPMENT GUARANTEES AND INSTRUCTIONS
- HEALTH RECORDS
- HOUSEHOLD INVENTORY
- INCOME TAX RECORDS
- MAGAZINE SUBSCRIPTIONS
- PROPERTY TAX RECORDS
- REAL ESTATE RECORDS

ADDRESSES

- HOME BUSINESS
- PERSONAL

BANK

- CANCELED CHECKS AND BANK STATEMENTS
  CURRENT YEAR
- DEPOSIT SLIPS
- INSTALLMENT AGREEMENTS
- LOAN CONTRACTS
- SAFE DEPOSIT BOX - LIST OF CONTENTS

BILLS - UNPAID

- UNPAID BILLS

CORRESPONDENCE

- HOME BUSINESS
- PERSONAL

INSURANCE PAPERS

- AUTOMOBILE
- FIRE
- HEALTH AND ACCIDENT
- HOMEOWNER'S PACKAGE
- LIABILITY
- LIFE
- PROPERTY
- THEFT

INVESTMENT AND SAVINGS

- BANK SAVINGS
- STOCKS AND BONDS

PERSONAL

- BIRTHDAY DATES
- CHRISTMAS CARD LIST
- HOBBIES
- READING BOOK LISTS

ORGANIZATIONS

- CHURCH
- SCHOOL

REFERENCE MATERIALS

- BUDGETING
- CHILD CARE
- CLEANING
- CLOTHING
- CRAFTS
- EQUIPMENT
- FOODS AND NUTRITION
- GARDENING
- HEALTH AND SAFETY
- HOME FURNISHINGS
- LANDSCAPING
- LAUNDRY
- REMODELING - BUILDING AND REPAIR

Farm and Home Filing System

ACCOUNTS AND RECORDS — FARM

- ACCOUNTS CROP AND LIVESTOCK SALES
- ACCOUNTS DEPRECIATION SCHEDULES
- ACCOUNTS FARM AND HOME*
- ACCOUNTS LIVESTOCK PURCHASES
- ACCOUNTS-NET WORTH*
- AUTOMOBILE AND TRUCK RECORDS
- COOPERATIVE PRO-RATION
- CROP AND FEED PRODUCTION INVENTORY*
- CROP AND FEED PRODUCTION-RECORD*
- EQUIPMENT GUARANTEES AND INSTRUCTIONS
- FARM INVENTORIES (1 COPY)*
- FARM PLANS
- FARM MAPS*
- GOVERNMENT PROGRAMS--ASC
- LIVESTOCK-BREEDING RECORDS*
- LIVESTOCK-FEEDING RECORDS
- LIVESTOCK-REGISTRATION PAPERS
- SOCIAL SECURITY RECORDS
- SOIL TESTS AND FERTILIZER RECORDS
- TAX RETURNS AND RECEIPTS-FEDERAL
- TAX RETURNS AND RECEIPTS-PROPERTY
- TAX RETURNS AND RECEIPTS-STATE

ACCOUNTS AND RECORDS — HOME

- EQUIPMENT GUARANTEES AND INSTRUCTIONS
- HEALTH RECORDS
- HOME ACCOUNTS
- HOUSEHOLD INVENTORIES (1 COPY)*
- HOUSE PLANS

ADDRESSES

- FARM BUSINESS
- HOME BUSINESS

BANK

- CANCELED CHECKS AND BANK STATEMENTS-CURRENT YEAR
- DEPOSIT SLIPS
- FINANCIAL STATEMENT
- INSTALLMENT AGREEMENTS
- LOANS AND MORTGAGES
- SAFE DEPOSIT BOX - LIST OF CONTENTS
- SAVINGS ACCOUNT PASSBOOK

BILLS — PAID

- CROP EXPENSES
- FEED BOUGHT
- FUEL
- IMPROVEMENTS
- LABOR
- LIVESTOCK
- MACHINERY
- OTHER

BILLS — UNPAID

- UNPAID BILLS

CORRESPONDENCE

- FARM BUSINESS
- HOME BUSINESS

INSURANCE PAPERS

- AUTOMOBILE AND TRUCK
- CROP
- FARM OWNERS POLICY
- HEALTH AND ACCIDENT
- LIFE

ORGANIZATION

- CHURCH
- EXTENSION GROUPS
- FARM ORGANIZATIONS
- 4-H CLUBS AND OTHER YOUTH ORGANIZATIONS
- SCHOOL

PERSONAL

- BIRTHDAY DATES
- CHRISTMAS CARD LISTS
- GIFT SUGGESTIONS

REFERENCES — FARM

- BEEF CATTLE
- CROPS AND WEED PROBLEMS
- DAIRY
- FARM BUILDINGS
- FARM MANAGEMENT
- HORTICULTURE
- INSECT AND DISEASE CONTROL
- IRRIGATION
- LANDSCAPING
- POULTRY
- RODENT CONTROL
- SHEEP
- SOIL CONSERVATION PRACTICES
- SOIL FERTILITY AND FERTILIZER
- SWINE
- VETERINARY

REFERENCES -- HOME

- BUDGETING
- CHILD CARE
- CLEANING
- CLOTHING
- CRAFTS
- EQUIPMENT
- FOODS AND NUTRITION
- GARDENING
- HEALTH-SAFETY
- HOME FURNISHINGS
- LAUNDRY
- REMODELING-BUILDING

SK U1 -12

Where Will You Keep Important Papers?

ITEM	CARRY WITH YOU	CURRENT FILE	STORE IN PERMANENT FILE	SAFE DEPOSIT BOX
ACCOUNT BOOKS		X	X	
AUTOMOBILE TITLE BILLS OF SALE				X
BANK STATEMENTS, DEPOSIT SLIPS, CHECK STUBS			FOR 3 YEARS	
BIRTH CERTIFICATES				X
BURIAL LOT DEEDS				X
CANCELLED CHECKS			FOR 3 YEARS	
DEBTS-WHAT WE OWE		X	FOR 5 YEARS AFTER PAID	
EMPLOYMENT RECORDS		X		
GUARANTEES, WARRANTIES		X	FOR LIFE OF PURCHASE	
IDENTIFICATION:				
DRIVERS LICENSE	X			
IF DIABETIC, NAME AND ADDRESS	X			
BLOOD TYPE	X			
WHOM TO NOTIFY, DR. PREFERRED	X			
INSTALLMENT PUCHASES WITH PAYMENTS SCHEDULED		X	FOR 5 YEARS AFTER PAID	
INSTRUCTION BOOKS		UNTIL SOLD		
INSURANCE POLICIES:				
PROPERTY		X		
PERSONAL LIABILITY		X		
HOSPITALIZATION		X		LIST
AUTOMOBILE		X		
LIFE		X		
INVENTORIES-HOUSEHOLD AND FARM		REVISE ANNUALLY		X
LIST OF SAFE DEPOSIT BOX CONTENTS		X		X
MARRIAGE AND DIVORCE RECORDS				X
MILITARY SERVICE RECORDS				X
REAL ESTATE PAPERS:				
PERIODIC RECEIPTS		X		
MORTGAGES				X
ABSTRACTS				X

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TM 4

RECEIPTS AND RECEIPTED BILLS		X	FOR 5 YEARS	
UNLESS TAX DEDUCTIBLE OR GUARANTEE				X
SOCIAL SECURITY CARD	X			X
STOCK CERTIFICATES, OTHER INVESTMENTS		LIST		X
TAX RETURNS AND RECORDS:				
INCOME		X	X	
PROPERTY		X	X	
WILLS		X		X

FARM BUSINESS CENTER

UNIT 1

TEST

1. List six reasons for having a business office.
   a.
   b.
   c.
   d.
   e.
   f.
2. What four points should you consider when planning a business center
   a.
   b.
   c.
   d.
3. What five pieces of office equipment are needed for a functional office
   a.
   b.
   c.
   d.
   e.
4. List three purposes of a filing system.
   a.
   b.

TEST

5. Name four steps in assembling a filing system

   a.

   b.

   c.

   d.

6. List four components of a filing system

   a.

   b.

   c.

   d.

7. Name seven uses of a filing system

   a.

   b.

   c.

   d.

   e.

   f.

   g.

FARM BUSINESS CENTER

UNIT 1

ANSWERS TO TEST

1. a. Provides a place to keep valuable papers and material from getting lost
   b. Provides a quiet place to think and work
   c. Makes paperwork easier and faster
   d. Helps prevent legal difficulties and loss of money
   e. Provides a place to meet with customers, salesmen
   f. Serves as a business expense
2. a. Size needed
   b. Attractiveness of office
   c. Location of office
   d. Consider the activities of all the family members
3. Any five of the following:
   a. A good desk and chair
   b. Good lights
   c. Book case and magazine rack
   d. Filing cabinet
   e. Bulletin board or chalkboard to use for members
   f. Adding machine or calculator
   g. Typewriter
4. Any three of the following:
   a. A definite place for materials
   b. Save time in finding materials
   c. Provides for current transactions and records and materials for a permanent record

ANSWERS TO TEST

5. a. Keep records and references separate in the filing system. References may be kept for several years whereas records change yearly

   b. Give consideration to who will use the filing system. If the farm homemaker does the major bookeeping, it will be convenient to combine the farm and home aspects of the business into one filing system

   c. File alphabetically rather than by number. It is easier to insert or delete folders without destroying the established filing pattern

   d. Build your filing system around the Kansas Farm Account Book and other special record books, such as D.H.I.A., that you use

   e. Individualize the filing system

6. Any four of the following:

   a. File cabinet or boxes

   b. Manila file folders

   c. File folder tabs

   d. File dividers

   e. Filing index

7. a. One problem of filing is to know what to file and what to throw away. In any event, the file will have to be cleaned out periodically to discard obsolete and outdated material

   b. Be sure everyone that will be using the system understands how it is organized

   c. If some folders fill up you may need to subdivide it into other categories or headings

   d. When filing materials that could be filed under more than one heading write the file heading at the top of the material to be sure it gets put back in the correct folder

   e. Leave four to five inches of "working space" in each file drawer

   f. Complete filing procedures daily; do not allow work to pile up

ANSWERS TO TEST

g. Don't pull out more than one file drawer at a time. Each drawer should be closed after use as a simple safety precaution

ESTATE PLANNING

UNIT 1

ESTATES AND TRUSTS

TERMINAL OBJECTIVE

Upon completion of this unit, students will be familiar with objectives and tools used in developing an estate plan. They will be familiar with the advantages and disadvantages of the tools available. This objective will be considered achieved by scoring at least eighty-five percent on the test.

SPECIFIC OBJECTIVES

After completion of this unit, students will be able to:

1. Match terms with their definitions concerning estate planning.
2. List six things that should be done in early stages of estate planning.
3. List five goals that are common among most farm families.
4. List twelve common objectives in estate planning.
5. List eight advantages of a will.
6. Identify six cash demands in estate settlements.
7. Name four forms of property ownership.
8. Identify five kinds of trusts.
9. Identify four reasons for having a trust.
10. Identify three prerequisites that each state imposes for the creation of a trust.
11. Identify the fourteen-step procedure in probating and settlement of an estate.
12. Identify two types of property.
13. List and describe three types of interest that exist with property.
14. Identify and define three types of ownership.

ESTATE PLANNING

UNIT 1

SUGGESTED ACTIVITIES

Instructor:

1. Provide students with Objective Sheet
2. Provide students with Information Sheets
3. Discuss Terminal and Specific Objectives
4. Discuss Information Sheets
5. Give test

Students:

1. Read Objectives
2. Study Information Sheets
3. Take test

INSTRUCTIONAL MATERIALS

Included in this unit:

1. Objectives
2. Information Sheets
3. Test
4. Answers to test

INSTRUCTIONAL MATERIALS

References:

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ESTATE PLANNING

UNIT 1

INFORMATION SHEET

I. Terms and Definitions

A. Administrator--A person or institution appointed by the court to manage and distribute the estate of a person who dies intestate; a person appointed by the court to manage and distribute the estate of a person who dies testate, but who has not appointed an executor or whose executor has not qualified.

B. Beneficiary--The designated recipient for proceeds from an insurance policy or trust.

C. Bequeath--The giving of personal property by will.

D. Bequest--A gift of personal property by will.

E. Codicil--A supplement or addition to a will; designed to change or add provisions to a will. Treated as part of the will and executed with the same formality.

F. Conservator--One who is charged with management and care of the property of another.

G. Corpus--The principal or assets of a trust.

H. Decedent--A person who has died; a deceased person.

I. Devise--A gift of real property by will; the giving of real property by will.

J. Devisee--One who received real property by will.

K. Donee--The recipient of a gift.

L. Donor--One who makes a gift to another.

M. Dower--At common law, the property interest of a widow in her husband's property; traditionally a life estate in one-third of his lands.

N. Escheat--The passage of property to the state.

O. Estate--All real and personal property owned by a person.

INFORMATION SHEET

P. Estate Planning--The process and dispositive arrangement from planned efforts to dispose of one's property at death, pursuant to an articulated or unarticulated set of objectives; includes consideration of ownership or co-ownership of property, beneficiary designations for life insurance, ownership of life insurance, making of wills.

Q. Executor--A person or firm named in a will to serve as the manager of the estate; the estate representative. An executor is charged with collecting the assets of the decedent, paying claims and taxes and distributing assets of the estate to heirs, legatees and devisees.

R. Federal Estate Tax--A graduated tax imposed upon the property held by a decedent at death, with the tax paid by the estate. The recipients of the property may be called to pay the tax to the extent of value of property received if the estate does not pay when due.

S. Federal Gift Tax--A tax imposed by the federal government upon the transfer of property to the extent that the consideration, if any, is less than the fair market value; the tax is imposed on 'taxable gifts' which are determined after allowing for the annual exclusion, gift tax material deduction gifts to charities, and lifetime exemption.

T. Fee Simple--The most complete ownership of an asset known to law; it is descendable to heirs, transferable; limited only by power of eminent domain, taxation power and police power.

U. Fiduciary Duty--A duty of responsibility, imposed by law, on individuals or firms having custody of or control over property or affairs of another.

V. Gift--A voluntary transfer or conveyance of property without consideration or for less than full and adequate consideration based on fair market value.

W. Gift in Contemplation of Death--Gifts made under circumstances suggesting that the donor was motivated by thoughts of death in making the gift.

X. Gifts to Minors Act--A system available under state law for making gifts to minors using a custodian to manage the property. Usually limited to gifts of stock, securities and money.

Y. Grantor--A person who creates or makes a trust. Also known as the settlor or trustor.

Z. Guardian--One who has the legal care, custody and control of another person.

AA. Heir--One who receives the property of an intestate decedent.

BB. Holographic Will-A will entirely in the handwriting of the testator. Many states do not recognize such wills unless witnessed. However, wills valid where made are generally considered valid elsewhere.

CC. Incidents of Ownership--Rights held by the owner of an insurance policy, including the right to change beneficiaries, borrow on the policy and take paid-up insurance.

DD. Income in Respect of Decedent--Income that is uncollected at death and is subjected to income taxation when realized by the estate, heir or beneficiary, in the same manner as the decedent would have done had he or she survived.

EE. Inheritance Tax--Imposed by several states on the individual receiving property by inheritance.

FF. Inter Vivos--Between the living; during life.

GG. Inter Vivos Gift--Voluntary transfer of property by one to another to the extent that consideration is not received by the donor.

HH. Intestacy--The state of having died without a valid will.

II. Intestate--A person dying without leaving a valid will; the act of dying without a will.

JJ. Joint Tenancy--Co-ownership of property with right of survivorship in the remaining owner or owners upon death of one joint tenant.

KK. Legacy--A gift, usually of personal property, made by will.

LL. Legatee--One who received personal property by will.

MM. Lien--A claim against property, real or personal, for satisfaction of a debt.

NN. Life Estate--An interest in property permitting the holder of the life estate, called the life tenant, to possess and use the asset for the duration of a specified life (usually the tenant's life); duty to pay taxes, interest and maintenance costs. An estate which is not terminable at any fixed or computable period of time and cannot last longer than the life or lives of one or more persons.

INFORMATION SHEET

OO. Marital Deduction - A deduction allowed in figuring the federal estate tax if a spouse survives; limited to lesser of one-half adjusted gross estate or amount passing to surviving spouse outright or nearly so.

PP. Mortgagee - One who advances money and received a note and mortgage in return.

QQ. Mortgagor - One who mortgages his property by signing a note establishing a promise to pay a sum of money and a mortgage giving the mortgagee a security interest in the collateral.

RR. Partition and Sale - A judicial process by which co-ownership of property is terminated by sale of the property and division of the proceeds or division of the property into shares for the respective owners.

SS. Per Stirpes - By right of representation. The legal means by which the children of a descendant, upon death of an ancestor, received if living.

TT. Personal Property - Assets other than real property; further subdivided as tangible personal property (machinery, livestock, inventory) and intangible personal property (stocks, bonds, bank accounts).

UU. Power of Attorney - Legal means of allowing someone to conduct your business for you. This power ceases when the grantor takes legal steps to stop the procedure. The power is not of a sound mind. Powers are limited by the person giving up his rights.

VV. Probate - Originally meaning "Proof of Will"; now expanded to mean the process of settling the estate of a decedent whether testate or intestate.

WW. Property - Technically, the collection of interests representing ownership of assets. As commonly used, all tangible and intantible assets capable of ownership.

XX. Real Property - Land and whatever is erected, growing upon or affixed to land. The term includes, for most purposes, fences, water systems, building, tile lines, mineral deposits, and air rights.

YY. Remainder - A property interest following a present possessory interest in an asset; a future interest; often follows life estate.

ZZ. Reversion - The property interest retained by the grantor of a limited interest in property to another; often follows a life estate.

INFORMATION SHEET

AAA. Tenancy by the Curtesy - At common law, the property interest of a widower in his wife's property; traditionally, a life estate in all her lands.

BBB. Tenancy in Common - Co-ownership of property with the interest of a deceased tenant in common passing to his heirs or under his will.

CCC. Testate - The state of dying after having made a valid will.

DDD. Testator - A male person who makes a will.

EEE. Testatrix - A female person who makes a will.

FFF. Trust - Arrangement whereby the management, control, and legal title to property are placed in a trustee to be held for the benefit of beneficiaries. If created during life, it is a "living" or "inter vivos" trust; if to be effective at death, usually by will, it is referred to as a "testamentary" trust.

GGG. Trustee - A person or firm charged with managing, investing reinvesting and making distributions of trust property as required by the trust instrument.

HHH. Trustor - The person who makes or creates a trust. Also known as the grantor or settlor.

III. Will - A legal document by which a person arranges for the disposition of his property at death, designation of an executor and nomination of a guardian.

II. Six Things That Should be Done in Early Stages of Estate Planning

A. Sit down with family and talk about estate owners objective.

B. Read magazines, a book, or extension bulletins on estate planning.

C. Inventory your property owner's estate at market value.

D. Visit your family lawyer, CPA or other specialist and discuss your property and goals.

E. Select a lawyer you trust.

F. Review your estate plans and update existing changes.

INFORMATION SHEET

III. The Five Goals That Are Common Among Most Farm Families

- A. Earn sufficient income now and at retirement.
- B. Help a child or children start farming.
- C. Treat all children equitably when estate is finally settled.
- D. Maintain family farm into next generation.
- E. Minimize taxes - income, estate and inheritance - and maximize benefits to family.

IV. Twelve Common Objectives in Estate Planning

- A. Provide sufficient income for the husband and wife as long as they live.
- B. To minimize or reduce federal estate taxes, gift, and state inheritance taxes.
- C. To minimize or reduce income and gift taxes.
- D. To minimize or reduce probate, administration and settlement costs.
- E. Provide for all children not necessarily equally, but equitably.
- F. Avoid splitting farm properties into uneconomic units.
- G. Avoid forced rule of a business, real estate or assets to provide for tax claims.
- H. Coordinate life insurance settlements into the estate plan.
- I. To provide necessary estate liquidity.
- J. To provide for continuity of family business.
- K. To bring children into the family business as owners and/or managers.
- L. To retain complete or partial control over one's business operations until retirement or death.

INFORMATION SHEET

V. Eight Advantages of a Will

A. Control property distribution at death.

B. Protect contingent beneficiaries.

C. Nomination of an executor.

D. Nomination of a guardian and conservator for minor children.

E. Set up trusts or life estates to benefit estate heirs.

F. Designate specific property requests to the desired beneficiaries.

G. Reduce time and expense in probate.

H. Reduced death taxes through the optimum estate tax marital deductions, charitable contributions and life estates.

VI. Six Cash Demands in Estate Settlements

A. Ordinary debts

B. Unpaid federal and state income tax

C. Unpaid property tax

D. Funeral and burial expense

E. Administration expense

F. Doctor, nursing and hospital bills

VII. The Four Forms of Property Ownership

A. Sole

B. Tenancy-in-Common

C. Joint-tenancy with right-of-survivorship

D. Life estates

INFORMATION SHEET

VIII. The Five Kinds of Trusts

A. Inter vivos or living - Created by grantor during his lifetime.

B. Irrevocable - Grantor gives away the corpus without any right or control over the income and no possibility of severtes, terminates any right to alter, amend, or revoke the trust.

C. Revocable - Grantor can revoke at any time or a certain specified time.

D. Testamentary - Grantor creates a trust through a will.

E. Life Insurance - Grantor creates a trust when he makes a trustee, say a bank, the beneficiary of a life insurance policy.

IX. The Four Reasons for Having a Trust

A. Reduces a tax liability of estate.

B. Allows creators some control over their wealth even after they die.

C. Assets of creator can be passed on to his or her children or grandchildren without loss to the principle or corpus.

D. Provide income and financial security to those who are inexperienced or incompetent.

X. The Three Prerequisites That Each State Imposes for the Creation of a Trust.

A. Created for any purpose that is not against public policy.

B. Must be an intention, on the part of the settler, declared in writing, to convey property of a trust for the benefit of beneficiaries.

C. Must be capacity among all the parties involved to create a trust.

XI. The Fourteen Steps in Probating and Settlement of an Estate.

A. Heirs locate the will or final instruction.

B. Check safety deposit box for will.

C. Select an administrator if an executor was not named in will.

D. Select lawyer.

E. Lawyer prepares a notice to be put in official newspaper announcing the date of hearings.

F. Judge holds hearing on proof of validity of will.

G. Executor is bonded for 125 percent of the value of personal property. The will may state executor can serve without a bond.

H. Court admits the will to probate.

I. Appoint appraisers.

J. Inventory and appraisal of estate.

K. Submitting of bills against estate.

L. Executor pay legal bills, (example: doctor, funeral).

M. Income tax, federal and estate taxes, and property tax must be paid.

N. Final settlement may be made after federal and state government release the estate for final settlement.

XII. The Two Types of Property

A. Real Property - Land and whatever is erected, growing upon or fixed to the land, for example, fences, buildings, water systems, tile lines, air right, mineral deposits.

B. Personal Property - All tangible and intangible assets that may be owned and that are not real property, for example, livestock, machinery, stored grain, bank deposits, stocks and bonds.

XIII. The Three Types of Interest That Exist With Property

A. Fee Simple Absolute - This is the greatest ownership interest which you can have in property. Holding title in this manner gives the owner(s) an almost unrestricted right to sell, lease, mortgage or dispose of the property during or after lifetime.

INFORMATION SHEET

B. Life Estate - The owner of a life estate has the right to use the real estate during his lifetime, as well as receive the income, but not to dispose of it at his death. Consequently, a farm held under a life estate does not become a part of the owner's estate upon his death, except under certain circumstances where it may be included for tax purposes. Upon the death of the life tenant, the holders of the remainder interest become sole owners or co-owners as the case may be. Both the life tenant and remainder parties must agree before property could be mortgaged or sold.

C. Remainder Interests - Includes all rights not held by the life tenant. Upon the death of the owner of a life estate, remaindermen acquire the property.

XIV. The Three Types of Ownerships

A. Sole Ownership - Full title to property in one person's name only. If married, the owner may not sell or mortgage the property without the spouse's consent.

B. Tenancy-in-Common - Co-ownership of property with the interest of a deceased tenant in common passing to heirs or under a will.

C. Joint tenancy - Co-ownership of property with right of survivorship in the remaining owner or owners upon death of one joint tenant.

ESTATE PLANNING

UNIT 1

TEST

1. Match: (NOTE: Answers to "a" through "o" are listed on this page.)

____a. Administrator

____b. Beneficiary

____c. Bequeath

____d. Bequest

____e. Codicil

____f. Conservator

____g. Corpus

____h. Decedent

____i. Devise

____j. Devisee

____k. Donee

____l. Donor

____m. Dower

____n. Escheat

____o. Estate

1. One who makes a gift to another.
2. The principle or assets of a trust.
3. Legal document to amend a will.
4. The recipient of a gift.
5. A gift of personal property by will.
6. The designated recipient for proceeds from an insurance policy.
7. All real and personal property owned by a person.
8. Common law, the property interest of a widow in her husband's property.
9. A person who has died.
10. One who is charged with management and care of the property of another.
11. Court appointed person to administer the estate.
12. A gift of real property by will.
13. The passage of property to the state.
14. One who receives real property by will.
15. The giving of personal property by will.

TEST

(NOTE: Answers to "p" through "dd" are listed on this page.)

____p. Estate Planning

____q. Executor

____r. Federal Estate Tax

____s. Federal Gift Tax

____t. Fee Simple

____u. Fiduciary Duty

____v. Gift

____w. Gift in contemplation of death.

____x Gifts to minor act

____y. Grantor

____z. Guardian

___aa. Heir

___bb. Holographic Will

___cc. Incidents in respect of decedent

___dd. Income in respect of decedent

16. One who receives the property of an intestate decedent.
17. A person named in a will to serve as the manager of the estate.
18. Most complete ownership of an asset known to law.
19. A person who creates or makes a will.
20. Voluntary transfer of property without consideration.
21. A planned effort to dispose of one's property.
22. Income that is uncollected at death and is subject to income tax.
23. One who has the legal care, custody and control of another person.
24. Graduated tax imposed upon the property held by a decedent at death with the tax paid by the estate.
25. A duty or responsibility, imposed by law.
26. A system for making gifts to minors using a custodian to manage the property.
27. Rights held by the owner of an insurance policy and include the right to change beneficiaries.
28. A will entirely in the handwriting of the testator.
29. Gifts made under circumstances motivated by thought of death.
30. Tax imposed by federal government up transfer of property for fair market value.

TEST

(NOTE: Answers to "ee" throught "ss" are listed on this page.)

____ee. Inheritance Tax

____ff. Inter vivos

____gg. Inter vivos Gift

____hh. Intestory

____ii. Intestate

____jj. Joint Tenancy

____kk. Legacy

____ll. Legatee

____mm. Lien

____nn. Life Estate

____oo. Marital Deduction

____pp. Mortgagee

____qq. Mortgagor

____rr. Partition and sale

____ss. Per stirpes

31. An interest in property permitting the holder to have life use of property.

32. The state of having died without a valid will.

33. A gift, usually of personal property, made by a will.

34. Legal means by which the children of a decedent receive the share of the ancestor's estate their parent would have received if living.

35. Having executed no valid will.

36. Between the living, during life.

37. A claim against the property for satisfaction of a debt.

38. Imposed by states on the individual receiving property by inheritance.

39. Voluntary transfer of property by one to another to the extent that consideration is not received by donor.

40. One who receives personal property by will.

41. One who advances money and receives a note and mortgage in return.

42. A judicial process by which co-ownership of property is terminated by sale of property and divided.

43. Co-ownership of property with right of survivorship to the remaining owner upon death of one of the owners.

44. One who mortgages his property by signing a mortgage.

45. A deduction allowed in figuring federal estate tax if spouse survives.

TEST

(NOTE: Answers to "tt" through "iii" are listed on this page.)

____tt. Personal Property

____uu. Power of Attorney

____vv. Probate

____ww. Property

____xx. Real Property

____yy. Remainder

____zz. Reversion

___aaa. Tenancy by the Curtesy

___bbb. Tenancy in Common

___ccc. Testate

___ddd. Testator

___eee. Testatrix

___fff. Trust

___ggg. Trustee

___hhh. Trustor

___iii. Will

46. Proof of the Will

47. A person or firm charged with managing trust property.

48. The state of dying after having made a valid will.

49. Assets such as stock, bonds, and bank account.

50. A male person who makes a will.

51. Power conferred upon another to conduct your business.

52. The person who makes or creates a trust.

53. Legal declaration in which a testator wishes his or her estate distributed after death.

54. A female person who makes a will.

55. A future interest, often follows a life estate.

56. Arrangement whereby the management, control the assets of one after death.

57. Land, buildings and mineral deposits.

58. Legal document by which a person arranges for the disposition of his property at death.

59. At common law, the property interest of a widower in his wife's property.

60. Property interest retained by the grantor of a limited interest in property to another.

61. Co-ownership of property with the interest of a deceased tenant passi to his heirs under his will.

TEST

2. List six things that should be done in the early stages of estate planning.

    a.

    b.

    c.

    d.

    e.

    f.

3. List five goals that are common among most farm families.

    a.

    b.

    c.

    d.

    e.

4. List twelve common objectives in estate planning.

    a.

    b.

    c.

    d.

    e.

    f.

    g.

    h.

    i.

    j.

    k.

    l.

TEST

5. List eight advantages of a will.

   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.

6. Identify six cash demands in estate settlements.

   a.

   b.

   c.

   d.

   e.

   f.

7. Name four forms of property ownership.

   a.

   b.

   c.

   d.

TEST

8. Identify five kinds of trust.

   a.

   b.

   c.

   d.

   e.

9. Give four reasons for having a trust.

   a.

   b.

   c.

   d.

10. Name three prerequisites that each state imposes for the creation of a trust.

   a.

   b.

   c.

11. List the fourteen-step procedure in probating and settlement of an estate.

   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.

   i.

TEST

j.

k.

l.

m.

n.

12. Identify two types of property.

a.

b.

13. List and describe three types of interest which exist with property.

a.

b.

c.

14. Define three types of ownerships.

a.

b.

c.

ESTATE PLANNING

UNIT I

ANSWERS TO TEST

1. a. 11
   b. 6
   c. 15
   d. 5
   e. 3
   f. 10
   g. 2
   h. 9
   i. 12
   j. 14
   k. 4
   l. 1
   m. 8
   n. 13
   o. 7
   p. 21
   q. 17
   r. 24
   s. 30
   t. 18
   u. 25
   v. 20
   w. 29
   x. 26
   y. 19
   z. 23
   aa. 16
   bb. 28
   cc. 27
   dd. 22
   ee. 38
   ff. 36
   gg. 39
   hh. 32
   ii. 35
   jj. 43
   kk. 33
   ll. 40
   mm. 37
   nn. 31
   oo. 45
   pp. 41
   qq. 44
   rr. 42
   ss. 34
   tt. 49
   uu. 51
   vv. 46
   ww. 53
   xx. 57
   yy. 55
   zz. 60
   aaa. 59
   bbb. 61
   ccc. 48
   ddd. 50
   eee. 54
   fff. 56
   ggg. 47
   hhh. 52
   iii. 58

ANSWERS TO TEST

2. a. Sit down with family and talk about estate owners objective.

   b. Read magazines, a book, or extension bulletins on estate planning.

   c. Inventory your property owners estate at market value.

   d. Visit your family lawyer, CPA or other specialist and discuss your property and goals.

   e. Select a lawyer you trust.

   f. Review your estate plans and update existing changes.

3. a. Earn sufficient income now and at retirement.

   b. Help a child or children state family.

   c. Treat all children equitable when estate is finally settled.

   d. Maintain family farm into next generation.

   e. Minimize taxes - income, estate and inheritance - and maximize benefits to family.

4. a. Provide sufficient income for the husband and wife as long as they live.

   b. To minimize or reduce federal estate taxes, gift, and state inheritance taxes.

   c. To minimize income and gift taxes.

   d. To minimize or reduce probate administration and settlement costs.

   e. Provide for all children not necessarily equally, but equitably.

   f. Avoid splitting farm properties into uneconomic units.

   g. Avoid forced sale of a business, real estate or assets to provide for tax claims.

   h. Coordinate life insurance settlements into the estate plan.

   i. To provide necessary estate liquidity.

   j. To provide for continuity of family business.

   k. To bring children into the family business as owners and/or managers.

   l. To retain complete or partial control over one's business operations until retirement or death.

ANSWERS TO TEST

5. a. Control property distributions at death.
   b. Protect contingent beneficiaries.
   c. Nomination of an executor.
   d. Nomination of a guardian and conservator for minor children.
   e. Set up trusts or life estates to benefit estate heirs.
   f. Designate specific property requests to the desired beneficiaries.
   g. Reduce time and expense in probate.
   h. Reduce death taxes through the optimum estate tax marital deductions, charitable contributions and life estates.

6. a. Ordinary Debts
   b. Unpaid Federal and State Income Tax
   c. Unpaid Property Tax
   d. Funeral and Burial Expense
   e. Administration Expense
   f. Doctor, Nursing and Hospital Bills

7. a. Sole
   b. Tenancy-in-Common
   c. Joint-Tenancy with Right of Survivorship
   d. Life Estates

8. a. Inter vivos or living
   b. Irrevocable
   c. Revocable
   d. Testamentary
   e. Life Insurance

9. a. Reduces tax liability of estate.
   b. Allows creators some control over their wealth even after they die.

ANSWERS TO TEST

c. Assets of creator can be passed on to his or her children or grand children without loss to the principle or corpus.

d. Provide income and financial security to those who are inexperienced or incompetent.

10. a. Created for any purpose that is not against public policy.

b. Must be an intention, on the part of the settlor, declared in writing, to convey property to a trust for the benefit of beneficiaries.

c. Must be capacity among all parties involved to create a trust.

11. a. Heirs locate the will or final instruction.

b. Check safety deposit box for will.

c. Select an administrator if an executor was not named in will.

d. Select lawyer.

e. Lawyer prepares a notice to be put in official newspaper announcing the date of hearings.

f. Judge holds hearing on proof of validity of will.

g. Executor is bonded for 125 percent of the value of personal property. The will may state executor can serve without a bond.

h. Court admits the will to probate.

i. Appoint appraisers.

j. Inventory and appraisal of estate.

k. Submitting of bills against estate.

l. Executor pay legal bills, (example: doctor, funeral)

m. Income tax, federal and estate taxes, and property tax must be paid.

n. Final settlement may be made after federal and state government release the estate for final settlement.

12. a. Real Property

b. Personal Property

ANSWERS TO TEST

13. a. Fee Simple Absolute - This is the greatest ownership interest which you can have in property.

    b. Life Estate - The owner of a life estate has the right to use the real estate during his lifetime, as well as receive the income, but not to dispose of it at his death.

    c. Remainder Interests - Includes all rights not held by the life tenant. Upon the death of the owner of a life estate, remaindermen acquire the property.

14. a. Sole Ownership - Full title to property in one person's name only. If married, the owner may not sell or mortgage the property without the spouse's consent.

    b. Tenancy in Common - Co-ownership of property with the interest of a a deceased tenant in common passing to heirs or under a will.

    c. Joint tenancy - Co-ownership of property with right of survivorship in the remaining owner or owners upon death of one joint tenant.